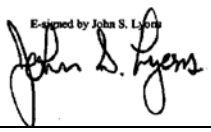
Commonwealth of Kentucky
Environmental and Public Protection Cabinet
Department for Environmental Protection
Division for Air Quality
200 Fair Oaks Lane
Frankfort, Kentucky 40601
(502) 573-3382

FINAL

AIR QUALITY PERMIT

Issued under 401 KAR 52:030

Permittee Name:	**Lubrizol Advanced Materials, Inc.**
Mailing Address:	**2468 Industrial Pkwy, P.O. Box 1498** **Calvert City, KY 42029**
Source Name:	**Lubrizol Advanced Materials, Inc.**
Mailing Address:	**2468 Industrial Pkwy, P.O. Box 1498** **Calvert City, KY 42029**
Source Location:	**2468 Industrial Pkwy, Calvert City, KY 42029**
Permit ID:	**F-05-051 R1**
Agency Interest #:	**46166**
Activity ID:	**APE20080001**
Review Type:	**Conditional Major/Synthetic** **Minor/Administrative Amendment/Operating**
Source ID:	**21-157-00060**
Regional Office:	**Paducah Regional Office** **130 Eagle Nest Drive** **Paducah, KY 42003-9435** **(270) 898-8468**
County:	**Marshall**
Complete Date:	**August 21, 2004**
Issuance Date:	**January 26, 2007**
Revision Date:	**October 2, 2008**
Expiration Date:	**January 26, 2012**



John S. Lyons, Director
Division for Air Quality

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Rev #	Permit Type	Activity #	Complete Date	Issuance Date	Summary of Actions
---	Initial Issuance	APE20040001	03/14/06	1/26/07	Initial Issuance, Operating, Conditional Major/Synthetic Minor
R1	Administrative Revision	APE20080001 APE20070001 APE20060001	8/28/08	10/2/08	Name change, revised operating plan and insignificant activities.

SECTION A –PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and received a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:030, Federally-enforceable Permits for Non-major Sources.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

C01 (01-10) Carbopol® Production Unit

01 **Description**: Nineteen (19) Polymerizer Charge Pots
Maximum Operating Limitation:
7,000 tons Carbopol® polymer per year using benzene carrier
6,000 tons Carbopol® polymer per year using ethyl acetate carrier
11,278 tons Carbopol® polymer per year using ethyl acetate-cyclohexane carrier
Source Equipment ID: FL-6N2, FL-4N2, FL-3N1, FL-3H, FL-1H, FL-7N2, FL-5N2, FL-2N2, FL-1N, FL-2H, FL-1G, TK-1/PLY-1N4, TK-1/PLY-2N4, TK-1/PLY-21E, TK-1/PLY-22E, TK-1/PLY-23E, TK-1/PLY-24E, TK-1/PLY-25E, TK-1/PLY-26E
Construction Date: 1957-1991
Control Equipment: None

02 **Description**: Nineteen (19) Polymerizers
Maximum Operating Limitation:
7,000 tons Carbopol® polymer per year using benzene carrier
6,000 tons Carbopol® polymer per year using ethyl acetate carrier
11,278 tons Carbopol® polymer per year using ethyl acetate-cyclohexane carrier
Source Equipment ID: PLY-1N4, PLY-2N4, PLY-21E, PLY-22E, PLY-23E, PLY-24E, PLY-25E, PLY-26E, RE-7N2, RE-6N2, RE-4N2, RE-3H, RE-1H, RE-3N1, RE-5N2, RE-1N, RE-2N, RE-2H, RE-1G
Construction Date: 1957-1991
Control Equipment: When in benzene service: Regenerative Carbon System (Carbon Adsorber Stack (AC1) vents to the Thermal Oxidizer (TO) except when the TO is not operational – not to exceed 1,927 hours during any consecutive 12-month period). When in ethyl acetate or cosolvent service: Thermal Oxidizer.

03 **Description**: Ten (10) Blow-Down Tanks
Maximum Operating Limitation:
7,000 tons Carbopol® polymer per year using benzene carrier
6,000 tons Carbopol® polymer per year using ethyl acetate carrier
11,278 tons Carbopol® polymer per year using ethyl acetate-cyclohexane carrier
Source Equipment ID: TK-10N2, TK-5N1, TK-107N, TK-4H, TK-11N2, TK-3N, TK-103P, TK-5H1, TK-23G, TK-25G
Construction Date: 1957-1991
Control Equipment: When in benzene service: Regenerative Carbon System (Carbon Adsorber Stack (AC1) vents to the Thermal Oxidizer (TO) except when the TO is not operational – not to exceed 1,927 hours during any consecutive 12-month period). When in ethyl acetate or cosolvent service: Thermal Oxidizer.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

04 **Description**: One (1) Blow-Down Tank
Annual Design Rate: 10 batches per year
Capacity: 2,500 gallons
Source Equipment ID: TK-3N- alternate use
Construction Date: 1957-1991
Control Equipment: None

05 **Description**: Four (4) Blow-Down Tanks
Maximum Operating Limitation:
7,000 tons Carbopol® polymer per year using benzene carrier
6,000 tons Carbopol® polymer per year using ethyl acetate carrier
11,278 tons Carbopol® polymer per year using ethyl acetate-cyclohexane carrier
Source Equipment ID: TK-1N5, TK-21G, TK-22G, TK-24G
Construction Date: 1957-1991
Control Equipment: When in benzene service: Regenerative Carbon System (Carbon Adsorber Stack (AC1) vents to the Thermal Oxidizer (TO) except when the TO is not operational – not to exceed 1,927 hours during any consecutive 12-month period). When in ethyl acetate or cosolvent service: Thermal Oxidizer.

06 **Description**: Eighteen (18) Rotary Dryers
Maximum Operating Limitation:
7,000 tons Carbopol® polymer per year using benzene carrier
6,000 tons Carbopol® polymer per year using ethyl acetate carrier
11,278 tons Carbopol® polymer per year using ethyl acetate-cyclohexane carrier
Source Equipment ID: DR-2P1, DR-1P1, DR-3H1, DR-2H, DR-1H, DR-101P, DR-100P, DR-1PA, DR-2PA, DR-3PA, DR-21H, DR-22H, DR-23H, DR-24H, DR-25H, DR-26H, DR-27H, DR-28H
Construction Date: 1957-1991
Control Equipment: When in benzene service: Regenerative Carbon System (Carbon Adsorber Stack (AC1) vents to the Thermal Oxidizer (TO) except when the TO is not operational – not to exceed 1,927 hours during any consecutive 12-month period). When in ethyl acetate or cosolvent service: Thermal Oxidizer.

07 **Description**: Four (4) Rotary Dryers
Maximum Operating Limitation:
7,000 tons Carbopol® polymer per year using benzene carrier
6,000 tons Carbopol® polymer per year using ethyl acetate carrier
11,278 tons Carbopol® polymer per year using ethyl acetate-cyclohexane carrier
Source Equipment ID: DR-29H, DR-30H, DR-31H, DR-32H
Construction Date: 1991
Control Equipment: When in benzene service: Regenerative Carbon System (Carbon Adsorber Stack (AC1) vents to the Thermal Oxidizer (TO) except when the TO is not operational – not to exceed 1,927 hours during any consecutive 12-month period). When in ethyl acetate or cosolvent service: Thermal Oxidizer.

08 **Description**: One (1) Spray Dryer

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Maximum Operating Limitation:
7,000 tons Carbopol® polymer per year using benzene carrier
Source Equipment ID: DR-1P3
Construction Date: 1975
Control Equipment: Regenerative Carbon System (Carbon Adsorber Stack (AC1) vents to the Thermal Oxidizer (TO) except when the TO is not operational – not to exceed 1,927 hours during any consecutive 12-month period). Spray dryer emergency vents to a carbon drum/canister (AC2).

09 **Description**: Two (2) Polymerizers
Annual Design Rate:
4,678 tons Carbopol® polymer per year using ethyl acetate carrier
4,678 tons Carbopol® polymer per year using ethyl acetate-cyclohexane carrier
Source Equipment ID: PLY-27E, PLY-28E
Construction Date: 2004
Control Equipment: Thermal Oxidizer (TO) except may be periodically vented through its process condenser to the atmosphere if the thermal oxidizer is not operational (not to exceed 1,927 hours during any consecutive 12-month period).

10 **Description**: Two (2) Horizontal Dryers
Annual Design Rate:
4,678 tons Carbopol® polymer per year using ethyl acetate carrier
4,678 tons Carbopol® polymer per year using ethyl acetate-cyclohexane carrier
Source Equipment ID: DR-33H, DR-34H
Construction Date: 2004
Control Equipment: Thermal Oxidizer (TO) except may be periodically vented through its process condenser to the atmosphere if the thermal oxidizer is not operational (not to exceed 1,927 hours during any consecutive 12-month period).

APPLICABLE REGULATIONS:
The source has elected to accept annual limits in order to preclude applicability of 401 KAR 51:017, *Prevention of Significant Deterioration of Air Quality*, and 401 KAR 52:020, *Title V Permits*.

401 KAR 63:020, *Potentially Hazardous Matter or Toxic Substances,* applies to sources which emit or may emit potentially hazardous or toxic substances.

NON-APPLICABLE REGULATIONS:
The provisions of 40 CFR 63, Subpart FFFF, Miscellaneous Organic NESHAP (MON) do not apply because the source-wide emissions of hazardous air pollutants are limited to less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for combined HAPs.

1. Operating Limitations:

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

To preclude the applicability 401 KAR 52:020, *Title V Permits* and 401 KAR 51:017, *PSD*, the permittee shall comply with the following operating limitations:

a. The total amount of Carbopol® produced using benzene as a carrier shall not exceed 14 million pounds per consecutive twelve (12) month period

b. The total amount of Carbopol® produced using ethyl acetate as a carrier shall not exceed 12 million pounds per consecutive twelve (12) month period; and

c. The total amount of Carbopol® produced using cosolvent (ethyl acetate-cyclohexane) as a carrier shall not exceed 22.556 million pounds per consecutive twelve (12) month period.

Compliance Determination Method:
Compliance with these operating limitations and the source emission limitations of **Section D.3** shall also make the requirements of 401 KAR 51:017, *Prevention of Significant Deterioration of Air Quality,* not applicable to this source.

2. Emission Limitations:

a. See **Condition 3.a** of **Section D - Source Emission Limitations and Testing Requirements** for source wide VOC and hazardous air pollutant emission limitations.

b. See **Condition 3.b** of **Section D - Source Emission Limitations and Testing Requirements** for source wide limitations.

Compliance Determination Method:
See **4. Specific Monitoring Requirements**, **5. Specific Recordkeeping Requirements** , and **6. Specific Reporting Requirements**.

3. Testing Requirements:
Testing shall be conducted at such times as may be required by the Cabinet in accordance with Regulations 401 KAR 52:030, Section 10 and 401 KAR 50:045.

4. Specific Monitoring Requirements:
The permittee shall monitor and maintain monthly and consecutive 12-month records of Carbopol® production (pounds) during each of benzene, ethyl acetate and cosolvent carrier usage.

5. Specific Recordkeeping Requirements:
The permittee shall keep records of monthly and consecutive 12-month Carbopol® production when using benzene, ethyl acetate and cosolvent as the respective carriers. Records shall be available within 30 days of the end of each month and made available to the Division upon request.

6. Specific Reporting Requirements:

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

The permittee shall report the consecutive 12-month production of Carbopol® in accordance with **5. Specific Recordkeeping Requirements** as part of the semiannual reporting required in **Section F.5 and F.6**.

7. Specific Control Equipment Operating Conditions:
The permittee shall comply with the requirements of **Section E - Source Control Equipment Requirements** for the Regenerative Carbon System and the Thermal Oxidizer (TO).

8. Alternate Operating Scenarios:
None

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

GROUP REQUIREMENTS - BENZENE STORAGE VESSELS

C02 (01-03) Benzene Storage Tanks and Recovery System (Support for C01 Process)

01 **Description**: One (1) Fresh Benzene Storage Tank
Annual Design Rate: 115,174 gallons per year
Source Equipment ID: TK-21B
Construction Date: pre-1984
Control Equipment: Regenerative Carbon System (Carbon Adsorber Stack (ACI) vents to the Thermal Oxidizer (TO) except when the TO is not operational- not to exceed 1,927 hours during any consecutive 12-month period).

02 **Description**: One (1) Recycle Benzene Storage Tank
Annual Design Rate: 15,531,085 gallons per year
Source Equipment ID: TK-22B
Construction Date: pre-1984
Control Equipment: Regenerative Carbon System (Carbon Adsorber Stack (ACI) vents to the Thermal Oxidizer (TO) except when the TO is not operational- not to exceed 1,927 hours during any consecutive 12-month period).

03 **Description**: One (1) Wet Benzene Storage Tank
Annual Design Rate: 2,628,000 gallons per year
Source Equipment ID: TK-23B
Construction Date: pre-1984
Control Equipment: Regenerative Carbon System (Carbon Adsorber Stack (ACI) vents to the Thermal Oxidizer (TO) except when the TO is not operational- not to exceed 1,927 hours during any consecutive 12-month period).

APPLICABLE REGULATIONS:
401 KAR 57:002, *Hazardous Pollutants*, which incorporates by reference 40 CFR 61, Subpart Y, *National Emission Standards for Hazardous Air Pollutants for Benzene Emissions from Benzene Storage Vessels*. 40 CFR 61, Subpart Y applies to each storage vessel that is storing benzene having a specific gravity within the range of specific gravities specified in ASTM D836–84 for Industrial Grade Benzene, ASTM D835–85 for Refined Benzene-485, ASTM D2359–85a or 93 for Refined Benzene-535, and ASTM D4734–87 or 96 for Refined Benzene-545. These specifications are incorporated by reference as specified in 40 CFR 61.18.

40 CFR 61, Subpart A (Section 61.12(c)), G*eneral Provisions*, are also applicable to these emission units.

NON-APPLICABLE REGULATIONS:
401 KAR 57:002, which incorporates by reference 40 CFR 61, Subpart BB, Benzene Transfer Operations, is not applicable to these benzene waste operations because the facility is not a benzene production facility or a bulk terminal, as defined in 40 CFR 61.301.

1. Operating Limitations:

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

a. In accordance with 40 CFR 61.270(b), the permittee shall comply only with the recordkeeping requirement of 40 CFR 61.276(b) for tank TK-23B. See **5.b Specific Recordkeeping Requirements**.

b. In accordance with 40 CFR 61.271, the permittee shall comply with the requirements in 40 CFR 61.271(d) as specified below for tanks TK-21B and TK-22B:
   (1) Pursuant to 40 CFR 61.271(c), the storage vessels shall be equipped with a closed vent system and a control device.
   (2) Pursuant to 40 CFR 61.271(c)(1), the closed vent system shall be designed to collect all benzene vapors and gases discharged from the storage vessel and operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in 40 CFR 61.242–11 (Subpart V).
   (3) Pursuant to 40 CFR 61.271(c)(2), the control device shall be designed and operated to reduce inlet benzene emissions by 95 percent or greater.
   (4) Pursuant to 40 CFR 61.271(c)(3), the specifications and requirements listed in 40 CFR 61.271(c)(1) and (c)(2) for closed vent systems and control devices do not apply during periods of routine maintenance. During periods of routine maintenance, the benzene level in the storage vessel(s) serviced by the control device subject to the provisions of 40 CFR 61.271(c) may be lowered but not raised. Periods of routine maintenance shall not exceed 72 hours as outlined in the maintenance plan required by 40 CFR 61.272(c)(1)(iii).
   (5) Pursuant to 40 CFR 61.271(c)(4), the specifications and requirements listed in 40 CFR 61.271(c)(1) and (c)(2) for closed vents and control devices do not apply during a control system malfunction. A control system malfunction means any sudden and unavoidable failure of air pollution control equipment. A failure caused entirely or in part by design deficiencies, poor maintenance, careless operation, or other preventable upset condition or equipment breakdown is not considered a malfunction.

Compliance Demonstration Method:
Refer to **3. Testing Requirements**, **4. Specific Monitoring Requirements**, **5. Specific Recordkeeping Requirements**, **6. Specific Reporting Requirements**, and **7. Specific Control System Operating Conditions**.

2. Emission Limitations:
Refer to **Section D - Source Emission Limitations and Testing Requirements** for source wide VOC and hazardous air pollutant emission limitations.

3. Testing Requirements:
Refer to Section D - Source Emission Limitations and Testing Requirements for source testing requirements.

4. Specific Monitoring Requirements:
a. Pursuant to 40 CFR 61.272(c) and the operating plan submitted to the U.S.E.P.A. on December 13, 1989 (and subsequent revisions), the permittee shall operate, monitor the parameters, and maintain the closed vent system and control device in accordance with the

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

operating plan submitted to the Division in accordance with 40 CFR 61.272(c)(1), unless the plan was modified by the Division during the approval process. In this case, the modified plan applies.

b. In accordance with 40 CFR 61.272(c)(1)(i), (ii) and (iii), the operating plan shall contain the following information:
   (1) Documentation demonstrating that the control device being used achieves the required control efficiency during reasonably expected maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and benzene content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases or liquids, other than fuels, from sources that are not designated sources under 40 CFR 61, Subpart Y, the efficiency demonstration is to include consideration of all vapors, gases and liquids received by the closed vent capture system and control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816 °C (1,500 °F) is used to meet the 95 percent requirement, documentation that those conditions exist is sufficient to meet the requirements of this paragraph;
   (2) A description of the parameter or parameters to be monitored to ensure that the control device is operated and maintained in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters); and
   (3) A maintenance plan for the system including the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods for those operations that would require the closed vent system or the control device to be out of compliance with 40 CFR 61.271(c). The maintenance plan shall require that the system be out of compliance with 40 CFR 61.271(c) for no more than 72 hours per year.

5. Specific Recordkeeping Requirements:

a. Each owner or operator with a storage vessel subject to 40 CFR 61, Subpart Y shall keep copies of all the reports and records required by 40 CFR 61, Subpart Y for at least five (5) years, except as specified in 40 CFR 61.276(b) and (c)(1).

b. Pursuant to 40 CFR 61.276(b), each owner or operator with a storage vessel, including any vessel which has a design storage capacity less than 38 cubic meters (10,000 gallons), shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel is in operation. Each storage vessel with a design capacity of less than 38 cubic meters (10,000 gallons) is subject to no provisions of 40 CFR 61, Subpart Y other than those required by 40 CFR 61.276(b).

c. Pursuant to 40 CFR 61.276(c), the following information pertaining to closed vent system and control devices shall be kept in a readily accessible location:

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(1) A copy of the operating plan. This record shall be kept as long as the closed vent system and control device is in use.
(2) A record of the measured values of the parameters monitored in accordance with 40 CFR 61.272(c)(1)(ii) and 40 CFR 61.272(c)(2).
(3) A record of the maintenance performed in accordance with 40 CFR 61.272(c)(1)(iii) of the operating plan, including the duration of each time the closed vent system and control device does not meet the specifications of 40 CFR 61.271(c) due to maintenance, including the following:
   (i) The first time of day and date the requirements of 40 CFR 61.271(c) were not met at the beginning of maintenance.
   (ii) The first time of day and date the requirements of 40 CFR 61.271(c) were met at the conclusion of maintenance.
   (iii) A continuous record of the liquid level in each storage vessel that the closed vent system and control device receive vapors from during the interval between the times specified by 40 CFR 61.276(c)(3)(i)(A) and (c)(3)(i)(B). Pumping records (simultaneous input and output) may be substituted for records of the liquid level.

6. Specific Reporting Requirements:

a. Pursuant to 40 CFR 61.275(e)(1), the owner or operator of each source seeking to comply with 40 CFR 61.271(c) (vessels equipped with closed vent systems with control devices) shall submit a quarterly report informing the Division of each occurrence that results in excess emissions. Excess emissions are emissions that occur at any time when compliance with the specifications and requirements of 40 CFR 61.271(c) are not achieved, as evidenced by the parameters being measured in accordance with 40 CFR 61.272(c)(1)(ii) if a control device other than a flare is used, or by the measurements required in 40 CFR 61.272(d) and the general control device requirements in 40 CFR 60.18(f) (1) and (2) if a flare is used. The permittee shall submit quarterly excess emissions and excursion reports to the Division's Paducah Regional Office for each quarter. The following schedule shall apply:
   (1) June 1 to August 31 reports are due September 30;
   (2) September 1 to November 30 reports are due December 31;
   (3) December 1 to February 29 reports are due March 31; and
   (4) March 1 to May 31 reports are due June 30.

b. Pursuant to 40 CFR 61.275(e)(2), the owner or operator shall submit the following information as a minimum in the report required by paragraph 6.a.:
   (1) Identify the stack and other emission points where the excess emissions occurred; and
   (2) A statement of whether or not the owner or operator believes a control system malfunction has occurred.

c. Pursuant to 40 CFR 61.275(e)(3), if the owner or operator states that a control system malfunction has occurred, the following information as a minimum is also to be included in the report required under paragraph 6.a.:

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(1) Time and duration of the control system malfunction as determined by continuous monitoring data (if any), or the inspections or monitoring done in accordance with the operating plan required by 40 CFR 61.272(c).
(2) Cause of excess emissions.

7. Specific Control Equipment Operating Conditions:
The permittee shall comply with the requirements of **Section E - Source Control Equipment Requirements** for the Regenerative Carbon System and the Thermal Oxidizer (TO).

8. Alternate Operating Scenarios:

a. Pursuant to 40 CFR 61.270(g)(1), owners or operators may choose to comply with 40 CFR 65, Subpart C, to satisfy the requirements of 40 CFR 61.271 through 61.277, except for 40 CFR 61.271(d)(2) and 61.274(a) for storage vessels that are subject to 40 CFR 61, Subpart Y. Other provisions applying to owners or operators who choose to comply with 40 CFR 65 are provided in 40 CFR 65.1.

b. Pursuant to 40 CFR 61.270(g)(2), owners or operators who choose to comply with 40 CFR 65, Subpart C, must also comply with 40 CFR 61.01, 61.02, 61.05 through 61.08, 61.10(b) through (d), 61.11, and 61.15 for those storage vessels. All sections and paragraphs of 40 CFR 61, Subpart A that are not mentioned in 40 CFR 61.270 (g)(2) do not apply for storage vessels complying with 40 CFR 65, Subpart C, except that provisions required to be met prior to implementing 40 CFR 65 still apply. Owners and operators who choose to comply with 40 CFR 65, Subpart C, must comply with 40 CFR 65, Subpart A.

c. Pursuant to 40 CFR 61.273(a), upon written application from any person, the Administrator, the U. S. EPA, may approve the use of alternative means of emission limitation which have been demonstrated to his satisfaction to achieve a reduction in benzene emissions at least equivalent to the reduction in emissions achieved by any requirement in 40 CFR 61.271(a), (b), or (c) of 40 CFR 61, Subpart Y.

d. Pursuant to 40 CFR 61.273(b), determination of equivalence to the reduction in emissions achieved by the requirements of 40 CFR 61.271(a), (b), or (c) will be evaluated using the following information to be included in the written application to the Administrator, the U. S. EPA:
   (1) Actual emissions tests that use full-size or scale-model storage vessels that accurately collect and measure all benzene emissions from a given control device, and that accurately simulate wind and account for other emission variables such as temperature and barometric pressure.
   (2) An engineering evaluation that the Administrator, the U. S. EPA determines is an accurate method of determining equivalence.

e. Pursuant to 40 CFR 61.273(c), the Administrator, the U. S. EPA may condition approval of equivalency on requirements that may be necessary to ensure operation and maintenance to achieve the same emission reduction as the requirements of 40 CFR 61.271(a), (b), or (c).

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

f. Pursuant to 40 CFR 61.273(d), if, in the Administrator's, the U. S. EPA 's, judgment, an application for equivalence may be approvable, the Administrator, the U. S. EPA will publish a notice of preliminary determination in the Federal Register and provide the opportunity for public hearing. After notice and opportunity for public hearing, the Administrator, the U. S. EPA will determine the equivalence of the alternative means of emission limitation and will publish the final determination in the Federal Register.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

GROUP REQUIREMENTS - FUGITIVE EMISSION SOURCES IN BENZENE SERVICE

C02 (04-11) Benzene Storage Tanks and Recovery System (Support for C01 Process)

04 **Description**: Benzene Dewatering System (column, condenser, decanter, bottoms pump, bottoms cooler.)
Maximum Operating Limitation:
7,000 tons Carbopol® polymer per year using benzene carrier
Source Equipment ID: DE-1D
Construction Date: On and after 1957
Control Equipment: Regenerative Carbon System (Carbon Adsorber Stack (ACI) vents to the Thermal Oxidizer (TO) except when the TO is not operational- not to exceed 1,927 hours during any consecutive 12-month period).

05 to 11 **Description:** Benzene Recovery System
Maximum Operating Limitation:
7,000 tons Carbopol® polymer per year using benzene carrier
Source Equipment ID: TK-21F (emission unit (EU) 06), TK-21H (EU05), TK-23F (EU08), TK-35F (EU10), DE-21F (EU11), DE-22F (EU07), V-100 (EU09)
Construction Date: On and after 1957
Control Equipment: Regenerative Carbon System (Carbon Adsorber Stack (ACI) vents to the Thermal Oxidizer (TO) except when the TO is not operational- not to exceed 1,927 hours during any consecutive 12-month period).

C05 (01) Fugitive Emissions (Carbopol® Process)

Description: Fugitive Emissions (Benzene Service: total components 13,848; Ethyl Acetate Service: total components 10,808; Cosolvent Service: total components 10,205) (pumps, relief devices, valves, and connectors) associated with the Carbopol® Process Area (C01).
Annual Rate: 8,760 hours per year
Source Equipment ID: F1
Construction Date: On and after 1957
Control Equipment: None

APPLICABLE REGULATIONS:

401 KAR 57:002, *Hazardous Pollutants*, which incorporates by reference 40 CFR 61, Subpart J, *National Emission Standards for Hazardous Air Pollutants for Equipment Leaks* (*Fugitive Emission Sources*) *of Benzene*. 40 CFR 61, Subpart J applies to the following sources that operate in benzene service: pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, and control devices or systems required by this regulation. A source to which 40 CFR 61, Subpart J applies that is also subject to the provisions of 40 CFR Part 60 will only be required to comply with the provisions of this 40 CFR 61, Subpart J. Sources that are required to comply with 40 CFR 61 Subpart J, must meet the requirements in 40 CFR 61 Subpart V, *National Emission Standards for Hazardous Air Pollutants for Equipment Leaks* (*Fugitive Emission Sources*).

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

401 KAR 57:002, *Hazardous Pollutants*, which incorporates by reference 40 CFR 61, Subpart V, *National Emission Standards for Hazardous Air Pollutants for Equipment Leaks* (*Fugitive Emission Sources*). 40 CFR 61, Subpart V applies to pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, and control devices or systems required by this regulation that are intended to operate in volatile hazardous air pollutant (VHAP) service.

40 CFR 61, Subpart A (Section 61.12(c)), *General Provisions*, are also applicable to these emission units.

1. Operating Limitations:

a. The permittee shall comply with the requirements in 40 CFR Part 61, Subpart V for affected sources in benzene service. [40 CFR 61.112(a)] These requirements include the emission standards and compliance, testing, monitoring, notification, recordkeeping, and reporting requirements, as specified in the following conditions of this section.

b. Pursuant to 40 CFR 61.112(b), an owner or operator may elect to comply with the requirements of 40 CFR 61.243–1 and 61.243–2.

c. Pursuant to 40 CFR 61.242-1(c)(1), an owner or operator may request a determination of alternative means of emission limitation to the requirements of 40 CFR 61.242–2, 61.242–3, 61.242–5, 61.242–6, 61.242–7, 61.242–8, 61.242–9 and 61.242–11 as provided in 40 CFR 61.244.

d. Pursuant to 40 CFR 61.242-1(d), each piece of equipment to which 40 CFR 61, Subpart V applies shall be marked in such a manner that it can be distinguished readily from other pieces of equipment.

e. Pursuant to 40 CFR 61.242-1(e), equipment that is in vacuum service is excluded from the requirements of 40 CFR 61.242–2, to 40 CFR 61.242–11 if it is identified as required in 40 CFR 61.246(e)(5).

Pumps: (40 CFR 61.242-2)

a. Pursuant to 40 CFR 61.242-2(a)(1), each pump shall be monitored monthly to detect leaks by the methods specified in 40 CFR 61.245(b), except as provided in 40 CFR 61.242–1(c) and 40 CFR 61.242-2(d), (e), (f) and (g).

b. Pursuant to 40 CFR 61.242-2(a)(2), each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

c. Pursuant to 40 CFR 61.242-2(b)(1), if an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

d. Pursuant to 40 CFR 61.242-2(b)(2), if there are indications of liquids dripping from the pump seal, a leak is detected.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

e. Pursuant to 40 CFR 61.242-2(c)(1), when a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 61.242–10.

f. Pursuant to 40 CFR 61.242-2(c)(2), a first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

g. Pursuant to 40 CFR 61.242-2(d), each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR 61.242-2(a) and (b), provided the following requirements are met:
   (1) Each dual mechanical seal system is:
      (i) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or
      (ii) Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 61.242–11; or
      (iii)Equipped with a system that purges the barrier fluid into a process stream with zero VHAP emissions to atmosphere.
   (2) The barrier fluid is not in VHAP service and, if the pump is covered by standards under 40 CFR part 60, is not in VOC service.
   (3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.
   (4) Each pump is checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.
      (i) If there are indications of liquid dripping from the pump seal at the time of the weekly inspection, the pump shall be monitored as specified in 40 CFR 61.245 to determine the presence of VOC and VHAP in the barrier fluid.
      (ii) If the monitor reading (taking into account any background readings) indicates the presence of VHAP, a leak is detected. For the purpose of this paragraph, the monitor may be calibrated with VHAP, or may employ a gas chromatography column to limit the response of the monitor to VHAP, at the option of the owner or operator.
      (iii)If an instrument reading of 10,000 ppm or greater (total VOC) is measured, a leak is detected.
   (5) Each sensor as described in 40 CFR 61.242-2(d)(3) is checked daily or is equipped with an audible alarm.
   (6) (i) The owner or operator determines, based on design considerations and operating experience, criteria applicable to the presence and frequency of drips and to the sensor that indicates failure of the seal system, the barrier fluid system, or both.
      (ii) If indications of liquids dripping from the pump seal exceed the criteria established in 40 CFR 61.242-2(d)(6)(i), or if, based on the criteria established in 40 CFR 61.242-2(d)(6)(i), the sensor indicates failure of the seal system, the barrier fluid system, or both, a leak is detected.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(iii) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after it is detected, except as provided in 40 CFR 61.242–10.

(iv) A first attempt at repair shall be made no later than five calendar days after each leak is detected.

h. Pursuant to 40 CFR 61.242-2(e), any pump that is designated, as described in 40 CFR 61.246(e)(2), for no detectable emissions, is exempt from the requirements of 40 CFR 61.242-2(a), (c), and (d) if the pump:
   (1) Has no externally actuated shaft penetrating the pump housing.
   (2) Is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c); and
   (3) Is tested for compliance with 40 CFR 61.242-2(e)(2) initially upon designation, annually, and at other times requested by the Division.

i. Pursuant to 40 CFR 61.242-2(f), if any pump is equipped with a closed-vent system capable of capturing and transporting any leakage from the seal or seals to a process or fuel gas system or to a control device that complies with the requirements of 40 CFR 61.242–11, it is exempt from the requirements of 40 CFR 242-2(a) through (e).

j. Pursuant to 40 CFR 61.242-2(g), any pump that is designated, as described in 40 CFR 61.246(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of 40 CFR 61.242-2(a) and (d)(4) through (d)(6) if:
   (1) The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 242-2(a); and
   (2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR 242-2(c) if a leak is detected.

k. Pursuant to 40 CFR 61.242-2(h), any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of 40 CFR 242-2(a)(2) and (d)(4), and the daily requirements of 40 CFR 61.242-2(d)(5), provided that each pump is visually inspected as often as practicable and at least monthly.

Compressors: (40 CFR 61.242-3)

a. Pursuant to 40 CFR 61.242-3(a), each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of process fluid to atmosphere, except as provided in 40 CFR 61.242–1(c) and 40 CFR 61.242-3(h) and (i).

b. Pursuant to 40 CFR 61.242-3(b), each compressor seal system as required in 40 CFR 61.242-3(a) shall be:
   (1) Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(2) Equipped with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 61.242–11; or
(3) Equipped with a system that purges the barrier fluid into a process stream with zero VHAP emissions to atmosphere.

c. Pursuant to 40 CFR 61.242-3(c), the barrier fluid shall not be in VHAP service and, if the compressor is covered by standards under 40 CFR 60, shall not be in VOC service.

d. Pursuant to 40 CFR 61.242-3(d), each barrier fluid system as described in 40 CFR 242-3(a) through (c) shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.

e. Pursuant to 40 CFR 61.242-3(e)(1), each sensor as required in 40 CFR 61.242-3(d) shall be checked daily or shall be equipped with an audible alarm unless the compressor is located within the boundary of an unmanned plant site.

f. Pursuant to 40 CFR 61.242-3(e)(2), the owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

g. Pursuant to 40 CFR 61.242-3(f), a leak is detected if the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined under 40 CFR 242-3(e)(2).

h. Pursuant to 40 CFR 61.242-3(g)(1), when a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 61.242–10.

i. Pursuant to 40 CFR 61.242-3(g)(2), a first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

j. Pursuant to 40 CFR 61.242-3(h), a compressor is exempt from the requirements of 40 CFR 61.242-3(a) and (b) if it is equipped with a closed-vent system to capture and transport leakage from the compressor drive shaft back to a process or fuel gas system or to a control device that complies with the requirements of 40 CFR 61.242–11, except as provided in 40 CFR 61.242-3(i).

k. Pursuant to 40 CFR 61.242-3(i), any compressor that is designated, as described in 40 CFR 61.246(e)(2), for no detectable emission is exempt from the requirements of 40 CFR 61.242-3(a) through (h) if the compressor:
(1) Is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c); and

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(2) Is tested for compliance with 40 CFR 61.242-3(i)(1) initially upon designation, annually, and at other times requested by the Division.

Pressure Relief Devices in Gas/Vapor Service: (40 CFR 61.242-4)

a. Pursuant to 40 CFR 61.242-4(a), except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c).

b. Pursuant to 40 CFR 61.242-4(b)(1), after each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 61.242–10.

c. Pursuant to 40 CFR 61.242-4(b)(2), no later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c).

d. Pursuant to 40 CFR 61.242-4(c), any pressure relief device that is routed to a process or fuel gas system or equipped with a closed-vent system capable of capturing and transporting leakage from the pressure relief device to a control device as described in 40 CFR 61.242–11 is exempt from the requirements of 40 CFR 61.242-4(a) and (b).

e. Pursuant to 40 CFR 61.242-4(d)(1), any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of 40 CFR 61.242-4(a) and (b), provided the owner or operator complies with the requirements in 40 CFR 61.242-4(d)(2).

f. Pursuant to 40 CFR 61.242-4(d)(2), after each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 61.242–10.

Sampling Connecting Systems: (40 CFR 61.242-5)

a. Pursuant to 40 CFR 61.242-5(a), each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed vent system, except as provided in 40 CFR 61.242–1(c). Gases displaced during filling of the sample container are not required to be collected or captured.

b. Pursuant to 40 CFR 61.242-5(b), each closed-purge, closed-loop, or closed vent system as required in 40 CFR 61.242-5(a) shall comply with the requirements specified in 40 CFR 61.242-5(b)(1) through (4):
(1) Return the purged process fluid directly to the process line; or
(2) Collect and recycle the purged process fluid; or

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(3) Be designed and operated to capture and transport all the purged process fluid to a control device that complies with the requirements of 40 CFR 61.242–11; or
(4) Collect, store, and transport the purged process fluid to any of the following systems or facilities:
(i) A waste management unit as defined in 40 CFR 63.111 if the waste management unit is subject to and operated in compliance with the provisions of 40 CFR 63, Subpart G, applicable to Group 1 wastewater streams; or
(ii) A treatment, storage, or disposal facility subject to regulation under 40 CFR Part 262, 264, 265, or 266; or
(iii)A facility permitted, licensed, or registered by a State to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 CFR Part 261.

c. Pursuant to 40 CFR 61.242-5(c), in-situ sampling systems and sampling systems without purges are exempt from the requirements of 40 CFR 61.242-5(a) and (b).

Open-ended Valves or Lines: (40 CFR 61.242-6)

a. Pursuant to 40 CFR 61.242-6(a)(1), each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 61.242–1(c).

b. Pursuant to 40 CFR 61.242-6(a)(2), the cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.

c. Pursuant to 40 CFR 61.242-6(b), each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.

d. Pursuant to 40 CFR 61.242-6(c), when a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with 40 CFR 61.242-6(a) at all other times.

e. Pursuant to 40 CFR 61.242-6(d), open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of 40 CFR 61.242-6(a), (b) and (c).

f. Pursuant to 40 CFR 61.242-6(e), open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in 40 CFR 61.242-6(a) through (c) are exempt from the requirements of 40 CFR 61.242-6(a) through (c).

Valves: (40 CFR 61.242-7)

a. Pursuant to 40 CFR 61.242-7(a), each valve shall be monitored monthly to detect leaks by the method specified in 40 CFR 61.245(b) and shall comply with 40 CFR 61.242-7(b)

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

through (e), except as provided in 40 CFR 61.242-7(f), (g), and (h), 40 CFR 61.243–1 or 40 CFR 61.243–2, and 40 CFR 61.242–1(c).

b. Pursuant to 40 CFR 61.242-7(b), a leak is detected if an instrument reading of 10,000 ppm or greater is measured.

c. Pursuant to 40 CFR 61.242-7(c)(1), any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.

d. Pursuant to 40 CFR 61.242-7(c)(2), if a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.

e. Pursuant to 40 CFR 61.242-7(d)(1), when a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 61.242–10.

f. Pursuant to 40 CFR 61.242-7(d)(2), a first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

g. Pursuant to 40 CFR 61.242-7(e), first attempts at repair include, but are not limited to, the following best practices where practicable:
   (1) Tightening of bonnet bolts;
   (2) Replacement of bonnet bolts;
   (3) Tightening of packing gland nuts; and
   (4) Injection of lubricant into lubricated packing.

h. Pursuant to 40 CFR 61.242-7(f), any valve that is designated, as described in 40 CFR 61.246(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 61.242-7(a) if the valve:
   (1) Has no external actuating mechanism in contact with the process fluid;
   (2) Is operated with emissions less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c); and
   (3) Is tested for compliance with 40 CFR 61.242-7(f)(2) initially upon designation, annually, and at other times requested by the Division.

i. Pursuant to 40 CFR 61.242-7(g), any valve that is designated, as described in 40 CFR 61.246(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 61.242-7(a) if:
   (1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 61.242-7(a); and
   (2) The owner or operator of the valve has a written plan that requires monitoring of the valve as frequent as practicable during safe-to-monitor times.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

j. Pursuant to 40 CFR 61.242-7(h), any valve that is designated, as described in 40 CFR 61.246(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 61.242-7(a) if:
   (1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface;
   (2) The process unit within which the valve is located is an existing process unit; and.
   (3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

Pressure Relief Services in Liquid Service and Connectors: (40 CFR 61.242-8)

a. Pursuant to 40 CFR 61.242-8(a), if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pressure relief devices in liquid service and connectors, the owner or operator shall follow either one of the following procedures, except as provided in 40 CFR 61.242–1(c):
   (1) The owner or operator shall monitor the equipment within 5 days by the method specified in 40 CFR 61.245(b) and shall comply with the requirements of 40 CFR 61.242-8(b) through (d); or
   (2) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak.

b. Pursuant to 40 CFR 61.242-8(b), a leak is detected if an instrument reading of 10,000 ppm or greater is measured.

c. Pursuant to 40 CFR 61.242-8(c)(1), when a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 61.242–10.

d. Pursuant to 40 CFR 61.242-8(c)(2), the first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

e. Pursuant to 40 CFR 61.242-8(d), first attempts at repair include, but are not limited to, the best practices described under 40 CFR 61.242–7(e).

Surge Control Vessels and Bottoms Receivers: (40 CFR 61.242-9)

Pursuant to 40 CFR 61.242-9(a), each surge control vessel or bottoms receiver that is not routed back to the process and that meets the conditions specified in table 1 or table 2 of 40 CFR 61, Subpart V shall be equipped with a closed-vent system capable of capturing and transporting any leakage from the vessel back to the process or to a control device as described in 40 CFR 61.242–11, except as provided in 40 CFR 61.242–1(c); or comply with the requirements of 40 CFR 63.119(b) or (c).

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Delay of Repair: (40 CFR 61.242-10)

a. Pursuant to 40 CFR 61.242-10(a), delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.

b. Pursuant to 40 CFR 61.242-10(b), delay of repair of equipment for which leaks have been detected will be allowed for equipment that is isolated from the process and that does not remain in VHAP service.

c. Pursuant to 40 CFR 61.242-10(c), delay of repair for valves will be allowed if:
   (1) The owner or operator demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair; and
   (2) When repair procedures are affected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR 61.242–11.

d. Pursuant to 40 CFR 61.242-10(d), delay of repair for pumps will be allowed if:
   (1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system; and
   (2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

e. Pursuant to 40 CFR 61.242-10(e), delay of repair beyond a process unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

Closed-vent Systems and Control Devices: (40 CFR 61.242-11)

a. Pursuant to 40 CFR 61.242-11(a), owners or operators of closed-vent systems and control devices used to comply with provisions of 40 CFR 61, Subpart V shall comply with the provisions of 40 CFR 61.242-11, except as provided in 40 CFR 61.242–1(c).

b. Pursuant to 40 CFR 61.242-11(b), vapor recovery systems (for example, condensers and absorbers) shall be designed and operated to recover the organic vapors vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent.

c. Pursuant to 40 CFR 61.242-11(c), enclosed combustion devices shall be designed and operated to reduce the VHAP emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent, or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760 °C.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

d. Pursuant to 40 CFR 61.242-11(e), owners or operators of control devices that are used to comply with the provisions of 40 CFR 61 Subpart V shall monitor these control devices to ensure that they are operated and maintained in conformance with their design.

e. Pursuant to 40 CFR 61.242-11(f), except as provided in 40 CFR 61.242-11(i) through (k), each closed vent system shall be inspected according to the procedures and schedule specified below, as applicable.
   (1) If the vapor collection system or closed vent system is constructed of hard-piping, the owner or operator shall comply with the following requirements:
      (i) Conduct an initial inspection according to the procedures in 40 CFR 61.245(b); and
      (ii) Conduct annual visual inspections for visible, audible, or olfactory indications of leaks.
   (2) If the vapor collection system or closed vent system is constructed of ductwork, the owner or operator shall:
      (i) Conduct an initial inspection according to the procedures in 40 CFR 61.245(b); and
      (ii) Conduct annual inspections according to the procedures in 40 CFR 61.245(b).

f. Pursuant to 40 CFR 61.242-11(g), leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in 40 CFR 61.242-11(h).

g. Pursuant to 40 CFR 61.242-11(g)(1), a first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

h. Pursuant to 40 CFR 61.242-11(g)(2), repair shall be completed no later than 15 calendar days after the leak is detected.

i. Pursuant to 40 CFR 61.242-11(h), delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown, or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown.

j. Pursuant to 40 CFR 61.242-11(i), if a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of 40 CFR 61.242-11(f)(1)(i) and (f)(2).

k. Pursuant to 40 CFR 61.242-11(j), any parts of the closed vent system that are designated as unsafe-to-inspect are exempt from the inspection requirements of 40 CFR 61.242-11(f)(1)(i) and (f)(2) if they comply with the following requirements:

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(1) The owner or operator determines that the equipment is unsafe-to-inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with 40 CFR 61.242-11(f)(l)(i) or (f)(2); and
(2) The owner or operator has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.

l. Pursuant to 40 CFR 61.242-11(k), any parts of the closed vent system that are designated, as described in 40 CFR 61.242-11(l)(2), as difficult-to-inspect are exempt from the inspection requirements of 40 CFR 61.242-11(f)(l)(i) and (f)(2) if they comply with the following requirements:
(1) The owner or operator determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and
(2) The owner or operator has a written plan that requires inspection of the equipment at least once every 5 years. A closed vent system is exempt from inspection if it is operated under a vacuum.

m. Pursuant to 40 CFR 61.242-11(l), the owner or operator shall record the following information:
(1) Identification of all parts of the closed vent system that are designated as unsafe-to-inspect, an explanation of why the equipment is unsafe-to-inspect, and the plan for inspecting the equipment;
(2) Identification of all parts of the closed vent system that are designated as difficult-to-inspect, an explanation of why the equipment is difficult-to-inspect, and the plan for inspecting the equipment;
(3) For each inspection during which a leak is detected, a record of the information specified in 40 CFR 61.246(c);
(4) For each inspection conducted in accordance with 40 CFR 61.245(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected; and
(5) For each visual inspection conducted in accordance with 40 CFR 61.242-11(f)(1)(ii) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

Compliance Demonstration Method*:*

a. Pursuant to 40 CFR 61.242-1(a), each owner or operator subject to the provisions of 40 CFR 61, Subpart V shall demonstrate compliance with the requirements of 40 CFR 61.242–1 to 61.242–11 for each new and existing source as required in 40 CFR 61.05, except as provided in 40 CFR 61.243 and 61.244.

b. Pursuant to 40 CFR 61.242-1(b), compliance with 40 CFR 61, Subpart V will be determined by review of records, review of performance test results, and inspection using the methods and procedures specified in 40 CFR 61.245.
c. Also refer to **3. Testing Requirements**, **5. Specific Recordkeeping Requirements**, **6. Specific Reporting Requirements**, and **7**. **Specific Control Equipment Operating Conditions**.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. Emission Limitations:

a. Pursuant to 40 CFR 61.242-1(c)(2), if the Division makes a determination that a means of emission limitation is at least a permissible alternative to the requirements of 40 CFR 61.242–2, 61.242–3, 61.242–5, 61.242–6, 61.242–7, 61.242–8, 61.242–9 or 61.242–11, an owner or operator shall comply with the requirements of that determination.

b. Pursuant to 40 CFR 61.112(c), an owner or operator may apply to the Division for a determination of an alternative means of emission limitation that achieves a reduction in emissions of benzene at least equivalent to the reduction in emissions of benzene achieved by the controls required in 40 CFR 61, Subpart J. In doing so, the owner or operator shall comply with requirements of 40 CFR 61.244.3

c. Refer to **Section D - Source Emission Limitations and Testing Requirements** for source wide VOC and hazardous air pollutant emission limitations.

3. Testing Requirements:

a. Pursuant to 40 CFR 61.245(a), each owner or operator subject to the provisions of 40 CFR 61, Subpart V shall comply with the test methods and procedures requirements provided in 40 CFR 61.245.

b. Pursuant to 40 CFR 61.245(b), monitoring, as required in 40 CFR 61.242, 61.243, 61.244, and 61.135, shall comply with the following requirements:
   (1) Monitoring shall comply with Method 21 of appendix A of 40 CFR 60;
   (2) The detection instrument shall meet the performance criteria of Method 21;
   (3) The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21;
   (4) Calibration gases shall be:
      (i) Zero air (less than 10 ppm of hydrocarbon in air); and
      (ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.
   (5) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21.

c. Pursuant to 40 CFR 61.245(c), when equipment is tested for compliance with or monitored for no detectable emissions, the owner or operator shall comply with the following requirements:
   (1) The requirements of 40 CFR 61.245(b)(1) through (4) shall apply;
   (2) The background level shall be determined, as set forth in Method 21;
   (3) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21; and
   (4) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

d. Pursuant to 40 CFR 61.245(d)(1), each piece of equipment within a process unit that can conceivably contain equipment in VHAP service is presumed to be in VHAP service unless an owner or operator demonstrates that the piece of equipment is not in VHAP service. For a piece of equipment to be considered not in VHAP service, it must be determined that the percent VHAP content can be reasonably expected never to exceed 10 percent by weight. For purposes of determining the percent VHAP content of the process fluid that is contained in or contacts equipment, procedures shall be used that conform to the methods described in ASTM Method D–2267 (incorporated by the reference as specified in 40 CFR 61.18).

e. Pursuant to 40 CFR 61.245(d)(2)(i), an owner or operator may use engineering judgment rather than the procedures in 40 CFR 61.245(d)(1) to demonstrate that the percent VHAP content does not exceed 10 percent by weight, provided that the engineering judgment demonstrates that the VHAP content clearly does not exceed 10 percent by weight. When an owner or operator and the Division do not agree on whether a piece of equipment is not in VHAP service, however, the procedures in 40 CFR 61.245(d)(1) shall be used to resolve the disagreement.

f. Pursuant to 40 CFR 61.245(d)(2)(ii), if an owner or operator determines that a piece of equipment is in VHAP service, the determination can be revised only after following the procedures in 40 CFR 61.245(d)(1).

4. Specific Monitoring Requirements:
Refer to **1. Operating Limitations**.

5. Specific Recordkeeping Requirements:

a. Pursuant to 40 CFR 61.246(a)(1), each owner or operator subject to the provisions of 40 CFR 61, Subpart V shall comply with the recordkeeping requirements of 40 CFR 61.246.

b. Pursuant to 40 CFR 61.246(a)(2), an owner or operator of more than one process unit subject to the provisions of 40 CFR 61, Subpart V may comply with the recordkeeping requirements for these process units in one recordkeeping system if the system identifies each record by each process unit.

c. Pursuant to 40 CFR 61.246(b), when each leak is detected as specified in 40 CFR 61.242-2, 61.242-3, 61.242-7, 61.242-8, and 61.135, the following requirements apply:
   (1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment;
   (2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 61.242-7(c) and no leak has been detected during those 2 months; and
   (3) The identification on equipment, except on a valve, may be removed after it has been repaired.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

d. Pursuant to 40 CFR 61.246(c), when each leak is detected as specified in 40 CFR 61.242-2, 61.242-3. 61.242-7, 61.242-8, and 61.135, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:
   (1) The instrument and operator identification numbers and the equipment identification number;
   (2) The date the leak was detected and the dates of each attempt to repair the leak;
   (3) Repair methods applied in each attempt to repair the leak;
   (4) "Above 10,000" if the maximum instrument reading measured by the methods specified in 40 CFR 61.245(a) after each repair attempt is equal to or greater than 10,000 ppm;
   (5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak;
   (6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown;
   (7) The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days;
   (8) Dates of process unit shutdowns that occur while the equipment is unrepaired; and
   (9) The date of successful repair of the leak.

e. Pursuant to 40 CFR 61.246(d), the following information pertaining to the design requirements for closed-vent systems and control devices described in 40 CFR 61.242–11 shall be recorded and kept in a readily accessible location:
   (1) Detailed schematics, design specifications, and piping and instrumentation diagrams;
   (2) The dates and descriptions of any changes in the design specifications;
   (3) A description of the parameter or parameters monitored, as required in 40 CFR 61.242–11(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring; and
   (4) Dates of startups and shutdowns of the closed-vent systems and control devices required in 40 CFR 61.242–2, 61.242–3, 61.242–4, 61.242–5 and 61.242–9.

f. Pursuant to 40 CFR 61.246(e), the following information pertaining to all equipment to which a standard applies shall be recorded in a log that is kept in a readily accessible location:
   (1) A list of identification numbers for equipment (except welded fittings) subject to the requirements of 40 CFR 61, Subpart V;
   (2) A list of identification numbers for equipment that the owner or operator elects to designate for no detectable emissions as indicated by an instrument reading of less than 500 ppm above background;
   (3) The designation of this equipment for no detectable emissions shall be signed by the owner or operator;
   (4) A list of equipment identification numbers for pressure relief devices required to comply with 40 CFR 61.242–4(a);
   (5) The dates of each compliance test required in 40 CFR 61.242–2(e), 61.242–3(i), 61.242–4, 61.242–7(f), and 61.135(g);
   (6) The background level measured during each compliance test;

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(7) The maximum instrument reading measured at the equipment during each compliance test; and
(8) A list of identification numbers for equipment in vacuum service.

g. Pursuant to 40 CFR 61.246(f), the following information pertaining to all valves subject to the requirements of 40 CFR 61.242–7(g) and (h) and to all pumps subject to the requirements of 40 CFR 61.242–2(g) shall be recorded in a log that is kept in a readily accessible location:
(1) A list of identification numbers for valves and pumps that are designated as unsafe to monitor, an explanation for each valve or pump stating why the valve or pump is unsafe to monitor, and the plan for monitoring each valve or pump; and
(2) A list of identification numbers for valves that are designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the planned schedule for monitoring each valve.

h. Pursuant to 40 CFR 61.246(g), the following information shall be recorded for valves complying with 40 CFR 61.243–2:
(1) A schedule of monitoring; and
(2) The percent of valves found leaking during each monitoring period.

i. Pursuant to 40 CFR 61.246(h), the following information shall be recorded in a log that is kept in a readily accessible location:
(1) Design criterion required in 40 CFR 61.242–2(d)(5), 61.242–3(e)(2), and 61.135(e)(4) and an explanation of the design criterion; and
(2) Any changes to this criterion and the reasons for the changes.

j. Pursuant to 40 CFR 61.246(i), the following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in the applicability section of 40 CFR 61, Subpart V and other specific subparts:
(1) An analysis demonstrating the design capacity of the process unit; and
(2) An analysis demonstrating that equipment is not in VHAP service.

k. Pursuant to 40 CFR 61.246(j), information and data used to demonstrate that a piece of equipment is not in VHAP service shall be recorded in a log that is kept in a readily accessible location.

6. Specific Reporting Requirements:

a. Pursuant to 40 CFR 61.247(a)(1), an owner or operator of any piece of equipment to which 40 CFR 61, Subpart V applies shall submit a statement in writing notifying the Division that the requirements of 40 CFR 61.242, 61.245, 61.246, and 61.247 are being implemented.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b. Pursuant to 40 CFR 61.247(a)(2), in the case of an existing source or a new source which has an initial startup date preceding the effective date, the statement is to be submitted within 90 days of the effective date, unless a waiver of compliance is granted under 40 CFR 61.11, along with the information required under 40 CFR 61.10. If a waiver of compliance is granted, the statement is to be submitted on a date scheduled by the Division.

c. Pursuant to 40 CFR 61.247(a)(4), for owners and operators complying with 40 CFR 65, Subpart C or F, the statement required under 40 CFR 61.247(a)(1) shall notify the Division that the requirements of 40 CFR 65, Subpart C or F, are being implemented.

d. Pursuant to 40 CFR 61.247(a)(5), the statement is to contain the following information for each source:
   (1) Equipment identification number and process unit identification;
   (2) Type of equipment (for example, a pump or pipeline valve);
   (3) Percent by weight VHAP in the fluid at the equipment;
   (4) Process fluid state at the equipment (gas/vapor or liquid); and
   (5) Method of compliance with the standard (for example, "monthly leak detection and repair" or "equipped with dual mechanical seals").

e. Pursuant to 40 CFR 61.247(b), a report shall be submitted to the Division semiannually starting 6 months after the initial report required in 40 CFR 61.247(a), that includes the following information:
   (1) Process unit identification;
   (2) For each month during the semiannual reporting period,
      (i) Number of valves for which leaks were detected as described in 40 CFR 61.242–7(b) of 40 CFR 61.243–2;
      (ii) Number of valves for which leaks were not repaired as required in 40 CFR 61.242–7(d);
      (iii) Number of pumps for which leaks were detected as described in 40 CFR 61.242–2 (b) and (d)(6);
      (iv) Number of pumps for which leaks were not repaired as required in 40 CFR 61.242–2 (c) and (d)(6);
      (v) Number of compressors for which leaks were detected as described in 40 CFR 61.242–3(f);
      (vi) Number of compressors for which leaks were not repaired as required in 40 CFR 61.242–3(g); and
      (vii) The facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible.
   (3) Dates of process unit shutdowns which occurred within the semiannual reporting period;
   (4) Revisions to items reported according to 40 CFR 61.247(a) if changes have occurred since the initial report or subsequent revisions to the initial report; and
   (5) The results of all performance tests and monitoring to determine compliance with no detectable emissions and with 40 CFR 61.243-1 and 61.243-2 conducted within the semiannual reporting period.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

f. Pursuant to 40 CFR 61.247(c), in the first report submitted as required in 40 CFR 61.247(a), the report shall include a reporting schedule stating the months that semiannual reports shall be submitted. Subsequent reports shall be submitted according to that schedule, unless a revised schedule has been submitted in a previous semiannual report.

g. Pursuant to 40 CFR 61.247(d), an owner or operator electing to comply with the provisions of 40 CFR 61.243-1 and 61.243-2 shall notify the Division of the alternative standard selected 90 days before implementing either of the provisions.

h. Pursuant to 40 CFR 61.247(e), an application for approval of construction or modification, 40 CFR 61.05(a) and 61.07, will not be required if:
   (1) The new source complies with the standard, 40 CFR 61.242;
   (2) The new source is not part of the construction of a process unit; and
   (3) In the next semiannual report required by 40 CFR 61.242(b), the information in 40 CFR 61.247(a)(5) is reported.

i. Pursuant to 40 CFR 61.247(f), for owners or operators choosing to comply with 40 CFR 65, Subpart C or F, an application for approval of construction or modification, as required under 40 CFR 61.05 and 61.07 will not be required if:
   (1) The new source complies with 40 CFR 65.106 through 65.115 and with 40 CFR 65, Subpart C, for surge control vessels and bottoms receivers;
   (2) The new source is not part of the construction of a process unit; and
   (3) The information in 40 CFR 61.247(a)(5) is reported in the next semiannual report required by 40 CFR 65.120(b) and 65.48(b).

7. Specific Control Equipment Operating Conditions:

a. Pursuant to 40 CFR 61.242-11(m), closed vent systems and control devices used to comply with provisions of 40 CFR 61, Subpart V shall be operated at all times when emissions may be vented to them.

b. The permittee shall comply with the requirements of **Section E - Source Control Equipment Requirements** for the Regenerative Carbon System and the Thermal Oxidizer (TO).

8. Alternate Operating Scenarios:

a. Pursuant to 40 CFR 61.240(d)(1), owners or operators may choose to comply with 40 CFR 65 to satisfy the requirements of 40 CFR 61.242-1 through 61.247 for equipment that is subject to 40 CFR 61, Subpart V, and that is part of the same process unit. When choosing to comply with 40 CFR 65, the requirements of 40 CFR 61.245(d) and 61.246(i) and (j) still apply. Other provisions applying to owners or operators who choose to comply with 40 CFR 65 are provided in 40 CFR 65.1.

b. Pursuant to 40 CFR 61.240(d)(2), owners or operators may choose to comply with 40 CFR 65, each surge control vessel and bottoms receiver subject to 40 CFR 61, Subpart V, that meets the conditions specified in table 1 or table 2 of 40 CFR 61, Subpart V shall meet the

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

requirements for storage vessels in 40 CFR 65, Subpart C. All other equipment subject to 40 CFR 61, Subpart V shall meet the requirements in 40 CFR 65, Subpart F.

c. Pursuant to 40 CFR 61.240(d)(3), owners or operators who choose to comply with 40 CFR 65, Subpart C or F, must also comply with 40 CFR 61.01, 61.02, 61.05 through 61.08, 61.10(b) through (d), 61.11, and 61.15 for that equipment. All sections and paragraphs of Subpart A that are not mentioned in 40 CFR 61.240(d)(3) do not apply to owners or operators of equipment subject to 40 CFR 61, Subpart V complying with 40 CFR 65, Subpart C or F, except that provisions required to be met prior to implementing 40 CFR 65 still apply. Owners and operators who choose to comply with 40 CFR 65, Subpart C or F, must comply with 40 CFR 65, Subpart A.

Alternative Standards for Valves in VHAP Service—Allowable Percentage of Valves Leaking:

a. Pursuant to 40 CFR 61.243-1(a), an owner or operator may elect to have all valves within a process unit comply with an allowable percentage of valves leaking of equal to or less than 2.0 percent.

b. Pursuant to 40 CFR 61.243-1(b), the following requirements shall be met if an owner or operator decides to comply with an allowable percentage of valves leaking:
   (1) An owner or operator must notify the Division that the owner or operator has elected to have all valves within a process unit to comply with the allowable percentage of valves leaking before implementing this alternative standard, as specified in 40 CFR 61.247(d);
   (2) A performance test as specified in 40 CFR 61.243-1(c) shall be conducted initially upon designation, annually, and at other times requested by the Division; and
   (3) If a valve leak is detected, it shall be repaired in accordance with 40 CFR 61.242–7(d) and (e).

c. Pursuant to 40 CFR 61.243-1(c), performance tests shall be conducted in the following manner:
   (1) All valves in VHAP service within the process unit shall be monitored within 1 week by the methods specified in 40 CFR 61.245(b);
   (2) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected; and
   (3) The leak percentage shall be determined by dividing the number of valves in VHAP service for which leaks are detected by the number of valves in VHAP service within the process unit.

d. Pursuant to 40 CFR 61.243-1(d), an owner or operator who elects to have all valves comply with this alternative standard shall not have a process unit with a leak percentage greater than 2.0 percent.

e. Pursuant to 40 CFR 61.243-1(e), if an owner or operator decides no longer to comply with 40 CFR 61.243–1, the owner or operator must notify the Division in writing that the work practice standard described in 40 CFR61.242–7(a) through (e) will be followed.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Alternative Standards for Valves in VHAP Service—Skip Period Leak Detection and Repair:

a. Pursuant to 40 CFR 61.243-2(a)(1), an owner or operator may elect for all valves within a process unit to comply with one of the alternative work practices specified in 40 CFR 61.243-2(b)(2) and (3).

b. Pursuant to 40 CFR 61.243-2(a)(2), an owner or operator must notify the Division before implementing one of the alternative work practices, as specified in 40 CFR 61.247(d).

c. Pursuant to 40 CFR 61.243-2(b)(1), an owner or operator shall comply initially with the requirements for valves, as described in 40 CFR 61.242–7.

d. Pursuant to 40 CFR 61.243-2(b)(2), after 2 consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2.0, an owner or operator may begin to skip one of the quarterly leak detection periods for the valves in VHAP service.

e. Pursuant to 40 CFR 61.243-2(b)(3), after five consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2.0, an owner or operator may begin to skip three of the quarterly leak detection periods for the valves in VHAP service.

f. Pursuant to 40 CFR 61.243-2(b)(4), if the percentage of valves leaking is greater than 2.0, the owner or operator shall comply with the requirements as described in 40 CFR 61.242–7 but may again elect to use 40 CFR 61.243-2.

Alternative Means of Emission Limitations:

Pursuant to 40 CFR 61.244(a), permission to use an alternative means of emission limitation under section 112(e)(3) of the Clean Air Act shall be governed by the following procedures:

a. Pursuant to 40 CFR 61.244(b), where the standard is an equipment, design, or operational requirement:
   (1) Each owner or operator applying for permission shall be responsible for collecting and verifying test data for an alternative means of emission limitation to test data for the equipment, design, and operational requirements; and
   (2) The Division may condition the permission on requirements that may be necessary to assure operation and maintenance to achieve the same emission reduction as the equipment, design, and operational requirements.

b. Pursuant to 40 CFR 61.244(c), where the standard is a work practice:
   (1) Each owner or operator applying for permission shall be responsible for collecting and verifying test data for an alternative means of emission limitation.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(2) For each source for which permission is requested, the emission reduction achieved by the required work practices shall be demonstrated for a minimum period of 12 months.
(3) For each source for which permission is requested, the emission reduction achieved by the alternative means of emission limitation shall be demonstrated.
(4) Each owner or operator applying for permission shall commit in writing each source to work practices that provide for emission reductions equal to or greater than the emission reductions achieved by the required work practices.
(5) The Division will compare the demonstrated emission reduction for the alternative means of emission limitation to the demonstrated emission reduction for the required work practices and will consider the commitment in 40 CFR 61.244(c)(4).
(6) The Division may condition the permission on requirements that may be necessary to assure operation and maintenance to achieve the same emission reduction as the required work practices of 40 CFR 61, Subpart (V)

c. Pursuant to 40 CFR 61.244(d), an owner or operator may offer a unique approach to demonstrate the alternative means of emission limitation.

d. Pursuant to 40 CFR 61.244(e)(1), manufacturers of equipment used to control equipment leaks of a VHAP may apply to the Division for permission for an alternative means of emission limitation that achieves a reduction in emissions of the VHAP achieved by the equipment, design, and operational requirements of 40 CFR 61, Subpart V.

e. Pursuant to 40 CFR 61.244(e)(2), the Division will grant permission according to the provisions of 40 CFR 61.244(b), (c), and (d).

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

C06 (01-06) Benzene Waste Operations (Support for C01 Process)

01 **Description**: One (1) Wastewater System Tank (Batch Still Feed)
Annual Design Rate: 10,220,000 gallons per year
Source Equipment ID: V-200
Construction Date: On and after 1957
Control Equipment: Thermal Oxidizer (TO), except may be periodically vented to an activated carbon drum (AC5) if the TO is not operational (not to exceed 1,927 hours during any consecutive 12-month period).

02 **Description**: One (1) Batch Still (C-220) and One (1) Decanter (V-220)
Annual Design Rate: 10,220,000 gallons per year
Source Equipment ID: C-220, V-220
Construction Date: On and after 1957
Control Equipment: Thermal Oxidizer (TO), except may be periodically vented to an activated carbon drum (AC5) if the TO is not operational (not to exceed 1,927 hours during any consecutive 12-month period).

03 **Description**: One (1) Process Stripper
Annual Design Rate: 43,800,000 pounds per year
Source Equipment ID: CL-1F
Construction Date: On and after 1957
Control Equipment: Regenerative Carbon System (Carbon Adsorber Stack (AC1)) vents to the Thermal Oxidizer (TO) except when the TO is not operational (not to exceed 1,927 hours during any consecutive 12-month period).

04 **Description**: One (1) Wastewater Storage Tank
Annual Design Rate: 15,599,560 gallons per year
Source Equipment ID: TK-1858
Construction Date: On and after 1957
Control Equipment: Thermal Oxidizer (TO), except may be periodically vented to an activated carbon drum (AC5) if the TO is not operational (not to exceed 1,927 hours during any consecutive 12-month period).

05 **Description**: One (1) Stripper Feed Tank
Annual Design Rate: 5,248,652 gallons per year
Source Equipment ID: TK-1F
Construction Date: On and after 1957
Control Equipment: Regenerative Carbon System (Carbon Adsorber Stack (AC1)) vents to the Thermal Oxidizer (TO) except when the TO is not operational (not to exceed 1,927 hours during any consecutive 12-month period).

06 **Description**: Wastewater Sumps and Lift Stations

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Annual Design Rate: 14,669,500 gallons per year (combined)
Source Equipment ID: SUMPS
Construction Date: On and after 1957
Control Equipment: None

APPLICABLE REGULATIONS:

401 KAR 57:002, *Hazardous Pollutants*, which incorporates by reference 40 CFR 61, Subpart FF, *National Emission Standards for Hazardous Air Pollutants for Benzene Waste Operation*s. 40 CFR 61, Subpart FF applies to owners and operators of chemical manufacturing plants.

In accordance with 40 CFR 61.340(c), at each facility identified above, the following waste is exempt from the requirements of this subpart:

(1) Waste in the form of gases or vapors that is emitted from process fluids;
(2) Waste that is contained in a segregated stormwater sewer system.

In accordance with 40 CFR 61.340(d), at each facility identified above, any gaseous stream from a waste management unit, treatment process, or wastewater treatment system routed to a fuel gas system, as defined in 40 CFR 61.341, is exempt from this subpart. No testing, monitoring, recordkeeping, or reporting is required under this subpart for any gaseous stream from a waste management unit, treatment process, or wastewater treatment unit routed to a fuel gas system.

40 CFR 61, Subpart A (Section 61.12(c)), *General Provisions*, are also applicable to these emission units.

1. **Operating Limitations:**
   Pursuant to 40 CFR 61.342(a), an owner or operator of a facility at which the total annual benzene quantity from facility waste is less than 10 megagrams per year (Mg/yr) (11 ton/yr) shall be exempt from the requirements of 40 CFR 61.342(b) and (c). The total annual benzene quantity from facility waste is the sum of the annual benzene quantity for each waste stream at the facility that has a flow-weighted annual average water content greater than 10 percent or that is mixed with water, or other wastes, at any time and the mixture has an annual average water content greater than 10 percent. The benzene quantity in a waste stream is to be counted only once without multiple counting if other waste streams are mixed with or generated from the original waste stream. Other specific requirements for calculating the total annual benzene waste quantity are as follows:

   a. Wastes that are exempted from control under 40 CFR 61.342(c)(2) and 61.342(c)(3) are included in the calculation of the total annual benzene quantity if they have an annual average water content greater than 10 percent, or if they are mixed with water or other wastes at any time and the mixture has an annual average water content greater than 10 percent.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b. The benzene in a material subject to 40 CFR 61, Subpart FF that is sold is included in the calculation of the total annual benzene quantity if the material has an annual average water content greater than 10 percent.

c. Benzene in wastes generated by remediation activities conducted at the facility, such as the excavation of contaminated soil, pumping and treatment of groundwater, and the recovery of product from soil or groundwater, are not included in the calculation of total annual benzene quantity for that facility. If the facility's total annual benzene quantity is 10 Mg/yr (11 ton/yr) or more, wastes generated by remediation activities are subject to the requirements of 40 CFR 61.342(c) through (h). If the facility is managing remediation waste generated offsite, the benzene in this waste shall be included in the calculation of total annual benzene quantity in facility waste, if the waste streams have an annual average water content greater than 10 percent, or if they are mixed with water or other wastes at any time and the mixture has an annual average water content greater than 10 percent.

d. The total annual benzene quantity is determined based upon the quantity of benzene in the waste before any waste treatment occurs to remove the benzene except as specified in 40 CFR 61.355(c)(1)(i) (A) through (C).

Delay of Repairs:

a. Pursuant to 40 CFR 61.350(a), delay of repair of facilities or units that are subject to the provisions of 40 CFR 61, Subpart FF will be allowed if the repair is technically impossible without a complete or partial facility or unit shutdown.

b. Pursuant to 40 CFR 61.350(b), repair of such equipment shall occur before the end of the next facility or unit shutdown.

Compliance Demonstration Method:

a. Compliance with 40 CFR 61, Subpart FF shall be determined by review of facility records and results from tests and inspections using methods and procedures specified in 40 CFR 61.355. [40 CFR 61.342(g)] See **3. Testing Requirements**.

b. Also see **5. Specific Recordkeeping Requirements**, **6. Specific Reporting Requirements**, and **7. Specific Control Equipment Operating Conditions**.

2. Emission Limitations:
Refer to **Section D - Source Emission Limitations and Testing Requirements** for source wide VOC and hazardous air pollutant emission limitations.

3. Testing Requirements:

a. Pursuant to 40 CFR 61.355(a), an owner or operator shall determine the total annual benzene quantity from facility waste by the following procedure:

(1) For each waste stream subject to 40 CFR 61, Subpart FF having a flow-weighted annual average water content greater than 10 percent water, on a volume basis as total water, or

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

is mixed with water or other wastes at any time and the resulting mixture has an annual average water content greater than 10 percent as specified in 40 CFR 61.342(a), the owner or operator shall:

(i) Determine the annual waste quantity for each waste stream using the procedures specified in 40 CFR 61.355(b).

(ii) Determine the flow-weighted annual average benzene concentration for each waste stream using the procedures specified in 40 CFR 61.355(c).

(iii) Calculate the annual benzene quantity for each waste stream by multiplying the annual waste quantity of the waste stream times the flow-weighted annual average benzene concentration.

(2) Total annual benzene quantity from facility waste is calculated by adding together the annual benzene quantity for each waste stream generated during the year and the annual benzene quantity for each process unit turnaround waste annualized according to 40 CFR 61.355(b)(4).

(3) If the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr (11 ton/yr), then the owner or operator shall comply with the requirements of 40 CFR 61.342(c), (d), or (e).

(4) If the total annual benzene quantity from facility waste is less than 10 Mg/yr (11 ton/yr) but is equal to or greater than 1 Mg/yr (1.1 ton/yr), then the owner or operator shall:

(i) Comply with the recordkeeping requirements of 40 CFR 61.356 and reporting requirements of 40 CFR 61.357; and

(ii) Repeat the determination of total annual benzene quantity from facility waste at least once per year and whenever there is a change in the process generating the waste that could cause the total annual benzene quantity from facility waste to increase to 10 Mg/yr (11 ton/yr) or more.

(5) If the total annual benzene quantity from facility waste is less than 1 Mg/yr (1.1 ton/yr), then the owner or operator shall:

(i) Comply with the recordkeeping requirements of 40 CFR 61.356 and reporting requirements of 40 CFR 61.357; and

(ii) Repeat the determination of total annual benzene quantity from facility waste whenever there is a change in the process generating the waste that could cause the total annual benzene quantity from facility waste to increase to 1 Mg/yr (1.1 ton/yr) or more.

(6) The benzene quantity in a waste stream that is generated less than one time per year, except as provided for process unit turnaround waste in 40 CFR 61.355(b)(4), shall be included in the determination of total annual benzene quantity from facility waste for the year in which the waste is generated unless the waste stream is otherwise excluded from the determination of total annual benzene quantity from facility waste in accordance with 40 CFR 61.355(a) through (c). The benzene quantity in this waste stream shall not be annualized or averaged over the time interval between the activities that resulted in generation of the waste, for purposes of determining the total annual benzene quantity from facility waste.

b. Pursuant to 40 CFR 61.355(b), for purposes of the calculation required by 40 CFR 61.355(a), an owner or operator shall determine the annual waste quantity at the point of waste

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

generation, unless otherwise provided in 40 CFR 61.355(b) (1), (2), (3), and (4), by one of the methods given in 40 CFR 61.355(b) (5) through (7).

c. Pursuant to 40 CFR 61.355(b)(1), the determination of annual waste quantity for sour water streams that are processed in sour water strippers shall be made at the point that the water exits the sour water stripper.

d. Pursuant to 40 CFR 61.355(b)(3), the determination of annual waste quantity for wastes that are received at hazardous waste treatment, storage, or disposal facilities from offsite shall be made at the point where the waste enters the hazardous waste treatment, storage, or disposal facility.

e. Pursuant to 40 CFR 61.355(b)(4), the determination of annual waste quantity for each process unit turnaround waste generated only at 2 year or greater intervals, may be made by dividing the total quantity of waste generated during the most recent process unit turnaround by the time period (in the nearest tenth of a year) between the turnaround resulting in generation of the waste and the most recent preceding process turnaround for the unit. The resulting annual waste quantity shall be included in the calculation of the annual benzene quantity as provided in 40 CFR 61.355(a)(1)(iii) for the year in which the turnaround occurs and for each subsequent year until the unit undergoes the next process turnaround. For estimates of total annual benzene quantity as specified in the 90-day report, required under 40 CFR 61.357(a)(1), the owner or operator shall estimate the waste quantity generated during the most recent turnaround, and the time period between turnarounds in accordance with good engineering practices. If the owner or operator chooses not to annualize process unit turnaround waste, as specified in this paragraph, then the process unit turnaround waste quantity shall be included in the calculation of the annual benzene quantity for the year in which the turnaround occurs.

f. Pursuant to 40 CFR 61.355(b)(5), select the highest annual quantity of waste managed from historical records representing the most recent 5 years of operation or, if the facility has been in service for less than 5 years but at least 1 year, from historical records representing the total operating life of the facility.

g. Pursuant to 40 CFR 61.355(b)(6) and (7), use the maximum design capacity of the waste management unit; or use measurements that are representative of maximum waste generation rates.

h. Pursuant to 40 CFR 61.355(c), for the purposes of the calculation required by 40 CFR 61.355(a), an owner or operator shall determine the flow-weighted annual average benzene concentration in a manner that meets the requirements given in 40 CFR 61.355(c)(1) using either of the methods given in 40 CFR 61.355(c)(2) and (c)(3).
   (1) The determination of flow-weighted annual average benzene concentration shall meet all of the following criteria: [40 CFR 61.355(c)(1)]
      (i) The determination shall be made at the point of waste generation except for the specific cases given in 40 CFR 61.355(c)(1)(i)(A), (C) and (D) below:

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(A) The determination for sour water streams that are processed in sour water strippers shall be made at the point that the water exits the sour water stripper.
(B) The determination for wastes that are received from offsite shall be made at the point where the waste enters the hazardous waste treatment, storage, or disposal facility.
(C) The determination of flow-weighted annual average benzene concentration for process unit turnaround waste shall be made using either of the methods given in 40 CFR 61.355(c)(2) or (c)(3). The resulting flow-weighted annual average benzene concentration shall be included in the calculation of annual benzene quantity as provided in 40 CFR 61.355(a)(1)(iii) for the year in which the turnaround occurs and for each subsequent year until the unit undergoes the next process unit turnaround.

(ii) Volatilization of the benzene by exposure to air shall not be used in the determination to reduce the benzene concentration.
(iii) Mixing or diluting the waste stream with other wastes or other materials shall not be used in the determination—to reduce the benzene concentration.
(iv) The determination shall be made prior to any treatment of the waste that removes benzene, except as specified in 40 CFR 61.355 (c)(1)(i)(A) through (D).
(v) For wastes with multiple phases, the determination shall provide the weighted-average benzene concentration based on the benzene concentration in each phase of the waste and the relative proportion of the phases.

(2) The owner or operator shall provide sufficient information to document the flow-weighted annual average benzene concentration of each waste stream. Examples of information that could constitute knowledge include material balances, records of chemicals purchases, or previous test results provided the results are still relevant to the current waste stream conditions. If test data are used, then the owner or operator shall provide documentation describing the testing protocol and the means by which sampling variability and analytical variability were accounted for in the determination of the flow-weighted annual average benzene concentration for the waste stream. When an owner or operator and the Division do not agree on determinations of the flow-weighted annual average benzene concentration based on knowledge of the waste, the procedures under 40 CFR 61.355(c)(3) shall be used to resolve the disagreement. [40 CFR 61.355(c)(2)]

(3) Measurements shall be made of the benzene concentration in the waste stream in accordance with the following procedures: [40 CFR 61.355(c)(3)]
(i) Collect a minimum of three representative samples from each waste stream. Where feasible, samples shall be taken from an enclosed pipe prior to the waste being exposed to the atmosphere.
(ii) For waste in enclosed pipes, the following procedures shall be used:
(A) Samples shall be collected prior to the waste being exposed to the atmosphere in order to minimize the loss of benzene prior to sampling.
(B) A static mixer shall be installed in the process line or in a by-pass line unless the owner or operator demonstrates that installation of a static mixer in the line is not necessary to accurately determine the benzene concentration of the waste stream.
(C) The sampling tap shall be located within two pipe diameters of the static mixer outlet.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(D) Prior to the initiation of sampling, sample lines and cooling coil shall be purged with at least four volumes of waste

(E) After purging, the sample flow shall be directed to a sample container and the tip of the sampling tube shall be kept below the surface of the waste during sampling to minimize contact with the atmosphere

(F) Samples shall be collected at a flow rate such that the cooling coil is able to maintain a waste temperature less than 10 °C (50 °F)

(G) After filling, the sample container shall be capped immediately (within 5 seconds) to leave a minimum headspace in the container

(H) The sample containers shall immediately be cooled and maintained at a temperature below 10 °C (50 °F) for transfer to the laboratory.

(iii) When sampling from an enclosed pipe is not feasible, a minimum of three representative samples shall be collected in a manner to minimize exposure of the sample to the atmosphere and loss of benzene prior to sampling.

(iv) Each waste sample shall be analyzed using one of the following test methods for determining the benzene concentration in a waste stream:

(A) Method 8020, Aromatic Volatile Organics, in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW–846 (incorporation by reference as specified in 40 CFR 61.18);

(B) Method 8021, Volatile Organic Compounds in Water by Purge and Trap Capillary Column Gas Chromatography with Photoionization and Electrolytic Conductivity Detectors in Series in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW–846 (incorporation by reference as specified in 40 CFR 61.18);

(C) Method 8240, Gas Chromatography/Mass Spectrometry for Volatile Organics in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW–846 (incorporation by reference as specified in 40 CFR 61.18);

(D) Method 8260, Gas Chromatography/Mass Spectrometry for Volatile Organics: Capillary Column Technique in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW–846 (incorporation by reference as specified in 40 CFR 61.18);

(E) Method 602, Purgeable Aromatics, as described in 40 CFR part 136, appendix A, Test Procedures for Analysis of Organic Pollutants, for wastewaters for which this is an approved EPA method; or

(F) Method 624, Purgeables, as described in 40 CFR part 136, appendix A, Test Procedures for Analysis of Organic Pollutants, for wastewaters for which this is an approved EPA method.

(v) The flow-weighted annual average benzene concentration shall be calculated by averaging the results of the sample analyses as follows:

$$\bar{C} = \frac{1}{Q_t} \times \sum_{i=1}^{n} (Q_i)(C_i)$$

Where:

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

C = Flow-weighted annual average benzene concentration for waste stream, ppmw.
Q_t = Total annual waste quantity for waste stream, kg/yr (lb/yr).
n = Number of waste samples (at least 3).
Q_i = Annual waste quantity for waste stream represented by C_i, kg/yr (lb/yr).
C_i = Measured concentration of benzene in waste sample i, ppmw.

4. Specific Monitoring Requirements:
Monitoring requirements shall consist of the records maintained in accordance with 40 CFR 61 Subpart FF, as specified in **5. Specific Recordkeeping Requirements**.

5. Specific Recordkeeping Requirements:

a. In accordance with 40 CFR 61.356(a), each owner or operator of a facility subject to the provisions of 40 CFR 61, Subpart FF shall comply with the recordkeeping requirements of 40 CFR 61.356. Each record shall be maintained in a readily accessible location at the facility site for a period not less than five years from the date the information is recorded unless otherwise specified.

b. Pursuant to 40 CFR 61.356(b), each owner or operator shall maintain records that identify each waste stream at the facility subject to 40 CFR 61, Subpart FF, and indicate whether or not the waste stream is controlled for benzene emissions in accordance with 40 CFR 61, Subpart FF. In addition the owner or operator shall maintain the following records:
   (1) For each waste stream not controlled for benzene emissions in accordance with 40 CFR 61, Subpart FF, the records shall include all test results, measurements, calculations, and other documentation used to determine the following information for the waste stream: waste stream identification, water content, whether or not the waste stream is a process wastewater stream, annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity. [40 CFR 61.356(b)(1)]
   (2) For each facility where the annual waste quantity for process unit turn-around waste is determined in accordance with 40 CFR 61.355(b)(5), the records shall include all test results, measurements, calculations, and other documentation used to determine the following information: identification of each process unit at the facility that undergoes turnarounds, the date of the most recent turnaround for each process unit, identification of each process unit turnaround waste, the water content of each process unit turnaround waste, the annual waste quantity determined in accordance with 40 CFR 355(b)(5), the range of benzene concentrations in the waste, and the annual benzene quantity calculated in accordance with 40 CFR 61.355(a)(1)(iii). [40 CFR 61.356(b)(5)]

6. Specific Reporting Requirements:

a. Pursuant to 40 CFR 61.357(a), each owner or operator of a chemical plant, petroleum refinery, coke by-product recovery plant, and any facility managing wastes from these industries shall submit to the Division within 90 days after January 7, 1993, or by the initial startup for a new source with an initial startup after the effective date, a report that

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

summarizes the regulatory status of each waste stream subject to 40 CFR 61.342 and is determined by the procedures specified in 40 CFR 61.355(c) to contain benzene. Each owner or operator subject to 40 CFR 61, Subpart FF who has no benzene onsite in wastes, products, by-products, or intermediates shall submit an initial report that is a statement to this effect. For all other owners or operators subject to 40 CFR 61, Subpart FF, the report shall include the following information:

(1) Total annual benzene quantity from facility waste determined in accordance with 40 CFR 61.355(a) of this subpart.

(2) A table identifying each waste stream and whether or not the waste stream will be controlled for benzene emissions in accordance with the requirements of 40 CFR 61, Subpart FF.

(3) For each waste stream identified as not being controlled for benzene emissions in accordance with the requirements of 40 CFR 61, Subpart FF the following information shall be added to the table:
   (i) Whether or not the water content of the waste stream is greater than 10 percent;
   (ii) Whether or not the waste stream is a process wastewater stream, product tank drawdown, or landfill leachate;
   (iii) Annual waste quantity for the waste stream;
   (iv) Range of benzene concentrations for the waste stream;
   (v) Annual average flow-weighted benzene concentration for the waste stream; and
   (vi) Annual benzene quantity for the waste stream.

(4) The information required in 40 CFR 61.357(a) (1), (2), and (3) should represent the waste stream characteristics based on current configuration and operating conditions. An owner or operator only needs to list in the report those waste streams that contact materials containing benzene. The report does not need to include a description of the controls to be installed to comply with the standard or other information required in 40 CFR 61.10(a).

b. Pursuant to 40 CFR 61.357(c), if the total annual benzene quantity from facility waste is less than 10 Mg/yr (11 ton/yr) but is equal to or greater than 1 Mg/yr (1.1 ton/yr), then the owner or operator shall submit to the Division a report that updates the information listed in 40 CFR 61.357(a)(1) through (3). The report shall be submitted annually and whenever there is a change in the process generating the waste stream that could cause the total annual benzene quantity from facility waste to increase to 10 Mg/yr (11 ton/yr) or more. If the information in the annual report required by 40 CFR 61.357(a)(1) through (3) is not changed in the following year, the owner or operator may submit a statement to that effect.

7. Specific Control Equipment Operating Conditions:

The permittee shall comply with the requirements of **Section E - Source Control Equipment Requirements** for the Regenerative Carbon System and the Thermal Oxidizer (TO).

8. Alternate Operating Scenarios:

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

None

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

C07 (01-02) Fugitive Emission Sources Not In Benzene Service

01 **Description**: Fugitive Emissions, total component count: 584 (pumps, relief devices, valves and connectors) associated with the acrylic acid storage tanks and the polymer charge lines.
Annual Rate: 8,760 hours per year
Source Equipment ID: F3
Construction Date: On and after 1957
Control Equipment: None

02 **Description**: Fugitive Emissions, total component count: 1,339 (pumps, relief devices, valves and connectors) associated with the Horizontal Reactor/Horizontal Dryer (HRHD) system.
Annual Rate: 8,760 hours per year
Source Equipment ID: F9
Construction Date: 2005
Control Equipment: None

APPLICABLE REGULATIONS:
The source has elected to accept annual limits in order to preclude applicability of 401 KAR 51:017, *Prevention of Significant Deterioration of Air Quality*, and 401 KAR 52:020, *Title V Permits*.

401 KAR 63:020, *Potentially Hazardous Matter or Toxic Substances*, applies to sources which emit or may emit potentially hazardous or toxic substances.

NON APPLICABLE REGULATIONS:
401 KAR 60:005, *40 C.F.R.. Part 60 standards of performance for new stationary sources*, which incorporates by reference 40 CFR 60, Subpart DDD, *Standards of Performance for Volatile Organic Compound (VOC) Emission from the Polymer Manufacturing Industry*. 40 CFR 60, Subpart DDD does not apply because the source does not manufacture polypropylene, polyethylene, polystyrene or poly (ethylene terephthalate), as defined at 40 CFR 60.561.

1. **Operating Limitations:**
   None

2. **Emission Limitations**:
   a. Refer to **Condition 3.a** of **Section D - Source Emission Limitations and Testing Requirements** for source wide VOC and hazardous air pollutant emission limitations.

   b. See **Condition 3.b** of **Section D - Source Emission Limitations and Testing Requirements** for source wide limitations.

3. **Testing Requirements:**
   Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 52:030, Section 10 and 401 KAR 50:045.
4. **Specific Monitoring Requirements:**

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

None

5. **Specific Recordkeeping Requirements:**
None

6. **Specific Reporting Requirements:**
None

7. **Specific Control Equipment Operating Conditions**:
None

8. **Alternate Operating Scenarios:**
None

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

C08 (01) Cooling Tower

Description: Cooling Tower
Annual Rate: 8,760 hours per year
Maximum Hourly Rate: 540 Kgal per hour cooling water recirculation rate
Source Equipment ID: CT
Construction Date: 1991
Control Equipment: None

APPLICABLE REGULATIONS:
401 KAR 63:010, *Fugitive Emissions*, applies to any apparatus, operation, or road which emits or may emit fugitive emissions provided that the fugitive emissions from such facility are not elsewhere subject to an opacity standard.

1. **Operating Limitations:**
   a. In order to preclude applicability of 40 CFR 63, Subpart Q, the use of chromium based water treatment chemicals in the cooling towers is prohibited (40 CFR 63 Subpart Q).

   b. Pursuant to 401 KAR 63:010, Section 3, no person shall cause, suffer, or allow any material to be handled without taking reasonable precaution to prevent particulate matter from becoming airborne.

   Compliance Demonstration Method:
   All reasonable measures shall be taken to prevent particulate matter from becoming airborne at all times. These measures shall include, but are not limited to the following:

   The permittee shall perform regular cooling tower maintenance as recommended by the vendor.

2. **Emission Limitations**:
   None

3. **Testing Requirements:**
   None

4. **Specific Monitoring Requirements:**
   None

5. **Specific Recordkeeping Requirements:**
   None

6. **Specific Reporting Requirements:**
   None

7. **Specific Control Equipment Operating Conditions**:

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

None

8. Alternate Operating Scenarios:
None

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:030, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

Description	Generally Applicable Regulation
1. Benzene tank truck unloading (BZU-1) Capacity: 116,000 gal/yr	401 KAR 63:020
2. Specialty additive reactor (RE-1J) Capacity: 650 gal	401 KAR 63:020
3. Specialty additive wash still (TK-2J) Capacity: 1,000 gal	401 KAR 63:020
4. Glacial acrylic acid storage tank #1 (TK-25B) Capacity: 5,600 gal	None
5. Glacial acrylic acid storage tank #2 (TK-26B) Capacity: 5,600 gal	None
6. Glacial acrylic acid storage tank #3 (TK-27B) Capacity: 10,050 gal	None
7. Glacial acrylic acid storage tank #4 (TK-28B) Capacity: 10,350 gal	None
8. Glacial acrylic acid unloading (AAU-1) Maximum Hourly Rate: 7,000 gal/hr	None
9. Acrylic acid neutralization tank (TK-1C) Capacity: 1,200 gal	None
10. Allyl chloride tank truck unloading (ACU-1) Capacity: N/A	401 KAR 63:020
11. Cosolvent recovery system (TK-32F, TK-33F, TK-35B, DE-1B) Capacity N/A	401 KAR 63:020
12. Cosolvent recovery system Depressurization (CSRSD) Capacity: N/A	401 KAR 63:020
13. Cyclohexane tank truck unloading (CHU-1) Capacity: 249,000 gal/yr	401 KAR 63:020

SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)

Description	Generally Applicable Regulation
14. Recycle ethyl acetate storage tank (TK-24B) Capacity: 15,300 gal	401 KAR 63:020
15. Ethyl acetate tank truck unloading (EAU-1) Capacity: 1,362,000 gal/yr	401 KAR 63:020
16. EA recovery and dewatering system (TK-29F, TK-31F, DE-3D, dewatering system) Capacity: N/A	401 KAR 63:020
17. Contingency wastewater storage tank (TK-152B) Capacity: 39,980 gal	401 KAR 63:020
18. Hazardous waste tank (V-202) Capacity: 2,800 gal	401 KAR 63:020
19. Surfactant storage tank (TK-5H) Capacity: 1,600 gal	401 KAR 63:020
20. Pipe and equipment leak emissions for waster water treatment, F2 (total components 1,693)	401 KAR 63:020
21. Pipe and equipment leak emissions (F8) (surfactant) (total components 70)	401 KAR 63:020
22. Filter (BL-N3180) for dryers #1-5 & packaging lines Capacity: N/A	401 KAR 59:010
23. Dryers #1-5 spare filter (BL-103) for #1-5 or 6-10 dryers & packaging lines Capacity: N/A	401 KAR 59:010
24. Dryers #11-14 filter (BL-21H) Capacity: N/A	401 KAR 59:010
25. Dryers #11-14 packaging line filter (BL-22H) Capacity: N/A	401 KAR 59:010
26. Dryers #15-18 filter (BL-23H) Capacity: N/A	401 KAR 59:010
27. Dryers #15-18 packaging line filter (BL-24H) Capacity: N/A	401 KAR 59:010

| Description | Generally Applicable Regulation |

SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)

28. Packaging line filter dust collector (BL-25H/ SED 25-H) Capacity: N/A	401 KAR 59:010
29. Lime dumping feed hopper (M-201) Capacity: 50,000 lbs/yr	401 KAR 59:010
30. Vacuum Jets (VJ-19H/20H) Capacity: N/A	401 KAR 59:010
31. Vacuum Jets (VJ-29H/30H) Capacity: N/A	401 KAR 59:010
32. Comonomer storage tank (TK-7H) Capacity: 550 gal	401 KAR 63:020
33. Polymerizer Charge Pots #20 and #21 (TK-1 and TK-2E) Capacity: 1.05 ft^3	401 KAR 63:020
34. Dryer condensate receiver tank (TK-38F) Capacity: 800 gal	401 KAR 63:020
35. Dryer #23 product hopper (HPR-33H) Capacity: 4,678,000 lbs/yr	401 KAR 59:010
36. Dryer #24 product hopper (HPR-34H) Capacity: 4,678,000 lbs/yr	401 KAR 59:010
37. Dryers #23 and #24 product densifier (BL-4H) Capacity: N/A	401 KAR 59:010
38. Dryers #23 and #24 box filling dust collector (BL-3H/ SED-31H) Capacity: N/A	401 KAR 59:010
39. Surfactant charge tank (TK-5C) Capacity: 350 gal	401 KAR 63:020
40. Copolymer charge tank (TK-4C) Capacity: 170 gal	None
41. Charge tank (TK-3C) Capacity: 40 gal	None

Description	Generally Applicable Regulation

SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)

42. Charge tank (TK-2C) Capacity: 40 gal	None
43. 50% sodium hydroxide storage tank (TK-37B) Capacity: 4,500 gal	None
44. Specialty additive weight tank (TK-111J) Capacity: 190 gal	None
45. Specialty additive weight tank (TK-110J) Capacity: 270 gal	None
46. Specialty additive storage tanks (TK-112J, TK-113J, TK-135J, and TK-136J) Capacity: varies	None
47. Brine (glycol) storage tank (TK-2R) Capacity: 8,800 gal	None
48. Additive reactor vent (BL-1J) Capacity: N/A	401 KAR 59:010
49. Emergency vents for Benzene Capacity: N/A	None
50. Dryer cosolvent recovery Capacity: N/A	401 KAR 63:020
51. Dryer ethyl acetate recovery Capacity: N/A	401 KAR 63:020
52. PTZ shot storage tank (TK-15B) Capacity: 140 gal	401 KAR 63:020
53. PTZ shot storage tank (TK-16B) Capacity: 140 gal	401 KAR 63:020
54. PTZ shot storage tank (TK-17B) Capacity: 240 gal	401 KAR 63:020
55. PTZ shot storage tank (TK-18B) Capacity: 240 gal	401 KAR 63:020

Description	Generally Applicable Regulation

SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)

56. Lab Hoods, Capacity: N/A	None
57. Vacuum pump knockout tank (TK-3J), Capacity:10 gal	401 KAR 63:020
58. Specialty additive solids feed hopper (HPR-1J) Capacity: 22 ft^3	401 KAR 59:010
59. Chilled glycol supply tank (TK-7R) Capacity: 1,300 gal	None
60. Nonprocess sumps Capacity: varies	None
61. Hazardous waste tank unloading to tanker (V-202L), vents to the thermal oxidizer, Capacity: N/A	None
62. Special additive wash tank (TK-115J) vents to the thermal oxidizer, atm (see cacls) Capacity: approx. 140 gal	401 KAR 63:020
63. Allyl chloride storage tank (TK-33B) vents to thermal oxidizer, AC4 Capacity: 10,050 gals	401 KAR 63:020
64. Ethyl acetate recovery system feed tank (TK-30F) vents to the thermal oxidizer Capacity: 1,000 gal	401 KAR 63:020
65. Cosolvent recovery system tank (TK-34B) vents to the thermal oxidizer Capacity: 64 gal	401 KAR 63:020
66. Cosolvent recovery system receiver (TK-34F), vent to the thermal oxidizer Capacity: 1,251 gal	401 KAR 63:020
67. Cosolvent storage tank (TK-32B), vents to the thermal oxidizer Capacity: 15,300 gal	401 KAR 63:020
68. Wet cosolvent storage tank (TK-36B), vents to the thermal oxidizer Capacity: 8,550 gal	401 KAR 63:020

Description	Generally Applicable Regulation
69. Cyclohexane storage tank (TK-31B), vents to the thermal oxidizer Capacity: 15,300 gal	401 KAR 63:020

SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)

70. Fresh ethyl acetate storage tank (TK-30B), vents to the thermal oxidizer Capacity: 15,300 gal	None
71. Vacuum cleaning systems (2), vent to VAC1, VAC2 Capacity: N/A	401 KAR 59:010, Section 3(1)(a) 401 KAR 59:010, Section 3(2)
72. Pipe and equipment leak emissions for allyl chloride storage, (F4) (total components 220)	401 KAR 63:020
73. Pipe and equipment leak emissions for Specialty Additive System, (F5) (total components 285)	401 KAR 63:020
74. Pipe and equipment leak emissions for hazardous waste tank and lines, (F6) (total components 336)	401 KAR 63:020
75. Filter (BL-26H) for dryers #6-10 & packaging lines Capacity: N/A	401 KAR 59:010
76. PTZ shot storage tank (TK-6C) Capacity: 37 gal	401 KAR 63:020
77. Vacuum Blower (CM-5H) Capacity: N/A	401 KAR 59:010
78. Tank cleanout into drums	401 KAR 63:020

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

2. a. Volatile organic compound (VOC) emissions, including benzene, cyclo-hexane and ethyl acetate, as measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.

b. Hazardous air pollutants (HAPs), including benzene, as measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.

3. **Source Emission Limitations:**

a. To preclude the applicability of 401 KAR 52:020, *Title V Permits*, and 401 KAR 51:017, *Prevention of Significant Deterioration of Air Quality*, the source wide emissions shall not equal or exceed the following limits on a consecutive twelve (12)-month basis:
(1) Volatile organic compound (VOC) emissions: 90 tons per year;
(2) Combined hazardous air pollutant (HAP) emissions: 22.5 tons per year; and
(3) Single hazardous air pollutants (HAPs) emissions: 9.0 tons per year.

The permittee shall also comply with the source wide production limitations established in **Section B** for the Carbopol® Production Unit (EP C01).

b. Pursuant to 401 KAR 63:020, no owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants.

Compliance Demonstration Method:

a. Calculate annual source wide emissions from all emission units specified in paragraph (2) below for each month of the previous 12-month period (i.e.: for the month of January, the compliance demonstration shall be completed in February and shall include all data from February of the previous year to the last day of January). The monthly compliance demonstration shall include, at a minimum, the following:
(1) The monthly and consecutive 12-month Carbopol® production (pounds) during each of benzene, ethyl acetate and cosolvent carrier usage.
(2) The monthly and consecutive total 12-month VOC, individual HAP, and combined HAP emission rates from the facility, including the following operations.

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

(i) EP C01 - Carbopol® Production Unit
(ii) EP C02 - Benzene Storage Tanks and Recovery System
(iii) EP C05 - Fugitive Emissions (Carbopol® Process)
(iv) EP C06 - Benzene Waste Operations
(v) EP C07 - Fugitive Emissions not in benzene service
(vi) Insignificant Activities, Section C

All emission calculations shall be based on acceptable chemical engineering references, including, but not limited to, Perry's *Chemical Engineers' Handbook* and AICHe's *Chemical Engineering Progress*; standard U.S. EPA methodology (i.e., material balance, current WATER software, current TANKS software for storage vessels, and AP-42 emission factors); current USEPA *Protocol for Equipment Leak Estimates* for fugitive component emission calculations using the screening values (SV) recorded as part of the source's Leak Detection and Repair (LDAR) program; and appropriate summing of the product of the weight percent of VOC and each HAP in the organic material emissions for each emission point. The permittee may also calculate emissions using emission factors derived from the above calculation methods and the maximum production rates.

The permittee shall use values for control efficiency as determined by the most recent performance tests conducted in accordance with **4. Source Testing Requirements**. The permittee shall apply the efficiency of the thermal oxidizer system only when the system is operational. See **6.b Source Recordkeeping Requirements**.

(3) Also see **Section E - Source Control Equipment Requirements**.

b. Demonstration of compliance with the requirements of 40 CFR Part 61, as specified in Section B of this permit, shall also serve as the demonstration of compliance with the air toxic limitation in paragraph 3.b. above. If the permittee alters process rates, material formulations, or any other factor that would result in an increase of HAP emissions or the addition of HAP emissions not previously evaluated by the Division, the source shall submit the appropriate application forms pursuant to 401 KAR 52:020. The source may perform a screening analysis of the potential to emit of applicable toxic pollutant emissions at the plant and compare it to established benchmarks (i.e. Reference Concentrations (RfCs), Unit Risk Estimates (UREs), as applicable).

4. Source Testing Requirements:

Within 180 days after issuance of this permit, the permittee shall conduct a performance test to verify the VOC and HAP control efficiencies of the regenerative carbon system and thermal oxidizer utilizing methods as approved by the Division.

a. Pursuant to Section 4 of 401 KAR 50:045, the permittee shall submit a compliance test protocol at least one month prior to the projected test date.
b. Pursuant to 401 KAR 50:045, Section 5, the Division shall be notified of the actual test date at least ten (10) days prior to the test.

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

c. The permittee shall record information that is necessary to document emission capture system and add-on control device operating conditions during the test and explain why the conditions represent normal operation.

d. The permittee shall also determine the average combustion chamber temperature of the thermal oxidizer during the test.

e. The test shall be performed at least once every five (5) years from the date of the most recent valid performance test.

5. Source Monitoring Requirements:

a. The permittee shall monitor and maintain monthly and consecutive 12-month records of Carbopol® production (pounds) during each of benzene, ethyl acetate and cosolvent carrier usage.

b. The permittee shall monitor and record the SV values associated with equipment leaks under the LDAR program.

c. The permittee shall continuously monitor the concentration of benzene and flow rate downstream of the regenerative carbon bed by using a computerized distributed control system (DCS).

d. See Section **E - Source Control Equipment Requirements**.

6. Source Recordkeeping Requirements:

The following records shall be maintained in order to demonstrate compliance with **3. Source Emission Limitations:**

a. The permittee shall keep records of the monthly and consecutive 12-month Carbopol® production when using each of benzene, ethyl acetate and cosolvent as the respective carriers; and actual computed VOC and HAP emissions. Records shall be available within 30 days of the end of each month. The permittee shall keep records of each incident when VOC and HAP emissions are not controlled by the thermal oxidizer, including periods that the oxidizer is shutdown. Records shall be kept to show when the thermal oxidizer is not operational. A control efficiency of 0% for the thermal oxidizer shall be used to calculate actual emissions from each emission unit or control device exhausted to the thermal oxidizer when the oxidizer is not in operation;

b. The permittee shall keep records of each performance test that is necessary to demonstrate compliance with a condition in this permit;

c The permittee shall keep records of each three (3) hour period or longer, where the average combustion chamber temperature of the thermal oxidizer is more than 28°C (50°F) below the average combustion chamber temperature of the oxidizer established during the most recent performance test. When calculating actual emissions the permittee shall use a control

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

efficiency of 0% for the thermal oxidizer for each period that the average combustion chamber temperature was more than 28°C (50°F) below the average combustion chamber temperature of the oxidizer established by the most recent performance testing;

d. The permittee shall keep records of all maintenance activities performed on the regenerative carbon adsorber system and the thermal oxidizer required by **Section E - Source Control Equipment Requirements**, including preventive maintenance and routine inspections;

e. The permittee shall keep continuous records of the combustion chamber temperature of the thermal oxidizer required by **Section E - Source Control Equipment Requirements**; and

f. The permittee shall maintain records of the monthly maximum concentration, flow rate, and mass emission rate of benzene downstream of the regenerative carbon bed, as recorded by the computerized distributed control system (DCS) data historian.

7. Source Reporting Requirements:

a. The permittee shall report the Division's Paducah Regional Office in accordance with **Section F.5 and F.6** the production of Carbopol® using each of benzene, ethyl acetate, and cosolvent as the respective carriers.

b. The permittee shall report to the Division's Paducah Regional Office the results of each performance test that is required to demonstrate compliance with a condition in this permit.

c. The permittee shall report exceedances or deviations of all operating and emission limitations to the Division's Paducah Regional Office in accordance with **Section F** of this permit.

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

1. Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

2. **Specific Control Equipment Operating Conditions:**

a. The polymerizers (RE-7N2, RE-6N2, RE-4N2, RE-3H, RE-1H, RE-3N1, RE-5N2, RE-1N, RE-2N, RE-2H, RE-1G, PLY-1N4, PLY-2N4, PLY-21E, PLY-22E, PLY-23E, PLY-24E, PLY-25E, PLY-26, PLY-27E, PLY-28E), blowdown tanks (TK-10N2, TK-5N1, TK-107N, TK-4H, TK-11N2, TK-3N, TK-103P, TK-5H1, TK-23G, TK-25G, TK-1N5, TK-21G, TK-22G, TK-24G, TK-3N- alternate use) and dryers (DR-2P1, DR-1P1, DR-3H1, DR-2H, DR-1H, DR-101P, DR-100P, DR-1PA, DR-2PA, DR-3PA, DR-21H, DR-22H, DR-23H, DR-24H, DR-25H, DR-26H, DR-27H, DR-28H, DR-29H, DR-30H, DR-31H, DR-32H, DR-1P3, PLY-27E, PLY-28E, DR-33H, DR-34H), all identified as EP C01, shall be controlled when operating in benzene service by the regenerative carbon system (AC1) at all times that the emission units are operating in benzene service. Emissions from AC1 shall exhaust to the thermal oxidizer when the oxidizer is in operation.

b. When the emission units specified in paragraph 2.a above are operating in ethyl acetate or cosolvent service, such emission units shall be vented to the thermal oxidizer at all times that the emission units are in operation, except that, batches in the polymerizers (PLY-27E and PLY-28E) and dryers (DR-33H, DR-34H) at the start of an unplanned shutdown of the thermal oxidizer may be allowed to run to completion in order to prevent unnecessary loss of product and/or damage of equipment.

c. The fresh benzene storage tank (TK-21B), the recycle benzene storage tank (TK-22B), wet benzene tank (TK-23B), benzene recovery system (TK-21F, TK-21H, TK-23F, TK-35F, DE-21F, DE-22F, V-100), and the benzene dewatering system (DE-1D), identified as EP C02, shall be controlled by the regenerative carbon system (AC1) at all times that the emission units are in operation. Emissions from AC1 shall exhaust to the thermal oxidizer when the oxidizer is in operation.

d. The wastewater storage tanks (V-200 and TK-1858) and batch still and decanter (C-220 and V-220), identified as EP C06, shall be controlled by the thermal oxidizer (TO) at all times that the emission units are in operation, except during periods when the thermal oxidizer is shutdown. When the thermal oxidizer is not operating, emissions from this equipment shall be vented to a carbon canister.

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS (CONTINUED)

e. The stripper feed tank (TK-1F) and process stripper (CL-1F), identified as EP C06, shall be controlled by the regenerative carbon system (AC1) at all times that the emission units are in operation and exhausted to the thermal oxidizer when the oxidizer is in operation.

f. Regenerative Carbon Adsorption System (AC1):
   (1) The permittee shall install, calibrate, maintain, and operate the regenerative carbon bed and the computerized distributed control system (DCS), which monitors the benzene concentration and flow rate downstream of the regenerative carbon bed, in accordance with the operating plan submitted to the Division in accordance with 40 CFR 51.272(c)(1), unless the plan was modified by the Division during the approval process. In this case, the modified plan applies.
   (2) The permittee shall ensure that desorbed hydrocarbons from regeneration of the off-line carbon bed shall be recovered or vented to the thermal oxidizer.
   (3) The standard operating procedures shall be located onsite at all times.
   (4) The permittee shall maintain records of system parameters in accordance with **Section D.6.**

g. Thermal Oxidizer:
   (1) The permittee shall: install, calibrate, maintain, and operate in accordance with manufacturer's specifications a temperature-monitoring device equipped with a continuous recorder in the firebox of the thermal oxidizer or in the duct immediately downstream of the firebox before any substantial heat exchange occurs;
   (2) Use a temperature sensor with a measurement sensitivity of 5 degrees Fahrenheit or 1.0 percent of the temperature value, whichever is larger;
   (3) Before using the sensor for the first time or when relocating or replacing the sensor, perform a validation check by comparing the sensor output to a calibrated temperature measurement device or by comparing the sensor output to a simulated temperature;
   (4) Conduct an accuracy audit every quarter and after every deviation. Accuracy audit methods include comparisons of sensor output to redundant temperature sensors, to calibrated temperature measurement devices, or to temperature simulation devices;
   (5) Conduct a visual inspection of each sensor every quarter if redundant temperature sensors are not used; and
   (6) The thermal oxidizer shall not be shutdown more that 1,927 hours per year while the plant is operating, and shall operate with the average combustion chamber temperature not more than 28°C (50°F) below the average combustion chamber temperature established during the most recent performance test.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQIREMENTS

1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
   a. Date, place (as defined in this permit), and time of sampling or measurements;
   b. Analyses performance dates;
   c. Company or entity that performed analyses;
   d. Analytical techniques or methods used;
   e. Analyses results; and
   f. Operating conditions during time of sampling or measurement.

2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [401 KAR 52:030 Section 3(1)(f)1a and Section 1a-7 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

3. In accordance with the requirements of 401 KAR 52:030 Section 3(1)f the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
   a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
   b. To access and copy any records required by the permit:
   c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

   Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:030 Section 22. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.

7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
   a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
   b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.

8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7 above) to the Regional Office listed on the front of this permit within 30 days. Deviations from permit requirements, including those previously reported under F.7 above, shall be included in the semiannual report required by F.6 [Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

9. Pursuant to 401 KAR 52:030, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit in accordance with the following requirements:
   a. Identification of each term or condition;
   b. Compliance status of each term or condition of the permit;
   c. Whether compliance was continuous or intermittent;
   d. The method used for determining the compliance status for the source, currently and over the reporting period.
   e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQIREMENTS (CONTINUED)

f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality	Division for Air Quality
Paducah Regional Office	Central Files
130 Eagle Nest Drive	200 Fair Oaks Lane 1st Floor
Paducah, KY 42003	Frankfort, KY 40601

10. In accordance with 401KAR 52:030, Section 3(1)(d), the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee. If a KYEIS emission survey is not mailed to the permittee, then the permittee shall comply with all other emission reporting requirements in this permit.

11. The Cabinet may authorize the temporary use of an emission unit to replace a similar unit that is taken off-line for maintenance, if the following conditions are met:
    a. The owner or operator shall submit to the Cabinet, at least ten (10) days in advance of replacing a unit, the appropriate Forms DEP7007AI to DD that show:
        (1) The size and location of both the original and replacement units; and
        (2) Any resulting change in emissions;
    b. The potential to emit (PTE) of the replacement unit shall not exceed that of the original unit by more than twenty-five (25) percent of a major source threshold, and the emissions from the unit shall not cause the source to exceed the emissions allowable under the permit;
    c. The PTE of the replacement unit or the resulting PTE of the source shall not subject the source to a new applicable requirement;
    d. The replacement unit shall comply with all applicable requirements; and
    e. The source shall notify Regional office of all shutdowns and start-ups.
    f. Within six (6) months after installing the replacement unit, the owner or operator shall:
        (1) Re-install the original unit and remove or dismantle the replacement unit; or
        (2) Submit an application to permit the replacement unit as a permanent change.

SECTION G - GENERAL PROVISIONS

1. General Compliance Requirements

a. The permittee shall comply with all conditions of this permit. A noncompliance shall be a violation of 401 KAR 52:030 Section 3(1)(b) and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to the termination, revocation and reissuance, revision, or denial of a permit [Section 1a-2 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-5 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:030 Section 18. The permit will be reopened for cause and revised accordingly under the following circumstances:
   (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:030 Section 12;
   (2) The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
   (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

   Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 6 and 7 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26]

SECTION G - GENERAL PROVISIONS (CONTINUED)

e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:030 Section 3(1)(c)].

f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:030 Section 7(1)].

g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-11 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

i. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens. [Section 1a-12-b of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038 Section 3(6) [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:030 Section 11(3)].

l. This permit does not convey property rights or exclusive privileges [Section 1a-8 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].

m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.

n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry.

SECTION G - GENERAL PROVISIONS (CONTINUED)

o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders.

p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

q. Pursuant to 401 KAR 52:030, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
(1) Applicable requirements that are included and specifically identified in this permit; and
(2) Non-applicable requirements expressly identified in this permit.

2. Permit Expiration and Reapplication Requirements

a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:030 Section 12].

b. The authority to operate granted through this permit shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:030 Section 8(2)].

3. Permit Revisions

a. Minor permit revision procedures specified in 401 KAR 52:030 Section 14(3) may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:030 Section 14(2).

b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

4. Construction, Start-Up, and Initial Compliance Demonstration Requirements

None

SECTION G - GENERAL PROVISIONS (CONTINUED)

5. Testing Requirements

a. Pursuant to 401 KAR 50:045 Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.

b. Pursuant to 401 KAR 50:045 Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.

c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

6. Acid Rain Program Requirements

If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

7. Emergency Provisions

a. Pursuant to 401 KAR 52:030 Section 23(1), an emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:

(1) An emergency occurred and the permittee can identify the cause of the emergency;
(2) The permitted facility was at the time being properly operated;
(3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and,
(4) The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two (2) working days of the time when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken.
(5) Notification of the Division does not relieve the source of any other local, state or federal notification requirements.

SECTION G - GENERAL PROVISIONS (CONTINUED)

b. Emergency conditions listed in General Provision G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:030 Section 23(3)].

c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:030 Section 23(2)].

8. Ozone depleting substances

a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
   (1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
   (2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
   (3) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
   (4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.
   (5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
   (6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

9. Risk Management Provisions

a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

   RMP Reporting Center
   P.O. Box 1515
   Lanham-Seabrook, MD 20703-1515.

b. If requested, submit additional relevant information to the Division or the U.S. EPA.

SECTION H - ALTERNATE OPERATING SCENARIOS

The alternate operating scenarios set forth below have been approved by the Division based on information supplied with the application and during the application review process. The terms and conditions of each alternate operating scenario have been developed to ensure compliance with the applicable regulations. The permittee, when making a change from one operating scenario to another, shall record contemporaneously in a log at the permitted facility a record of the scenario under which the facility is operating. The permit shield, as provided in Section G, shall extend to each alternate operating scenario set forth in this Section. All conditions not specified under an alternate operating scenario shall remain unchanged from their permit values or requirements.

Refer to **Section B-Alternate Operating Scenarios**.

SECTION I - COMPLIANCE SCHEDULE

None